U.S. DEPARTMENT OF COMMERCE
National Technical Information Service

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SOUTH PLATTE RIVER BASIN ACCOMPLISHMENT PLAN

ENVIRONMENTAL PROTECTION AGENCY

4 DECEMBER 1972

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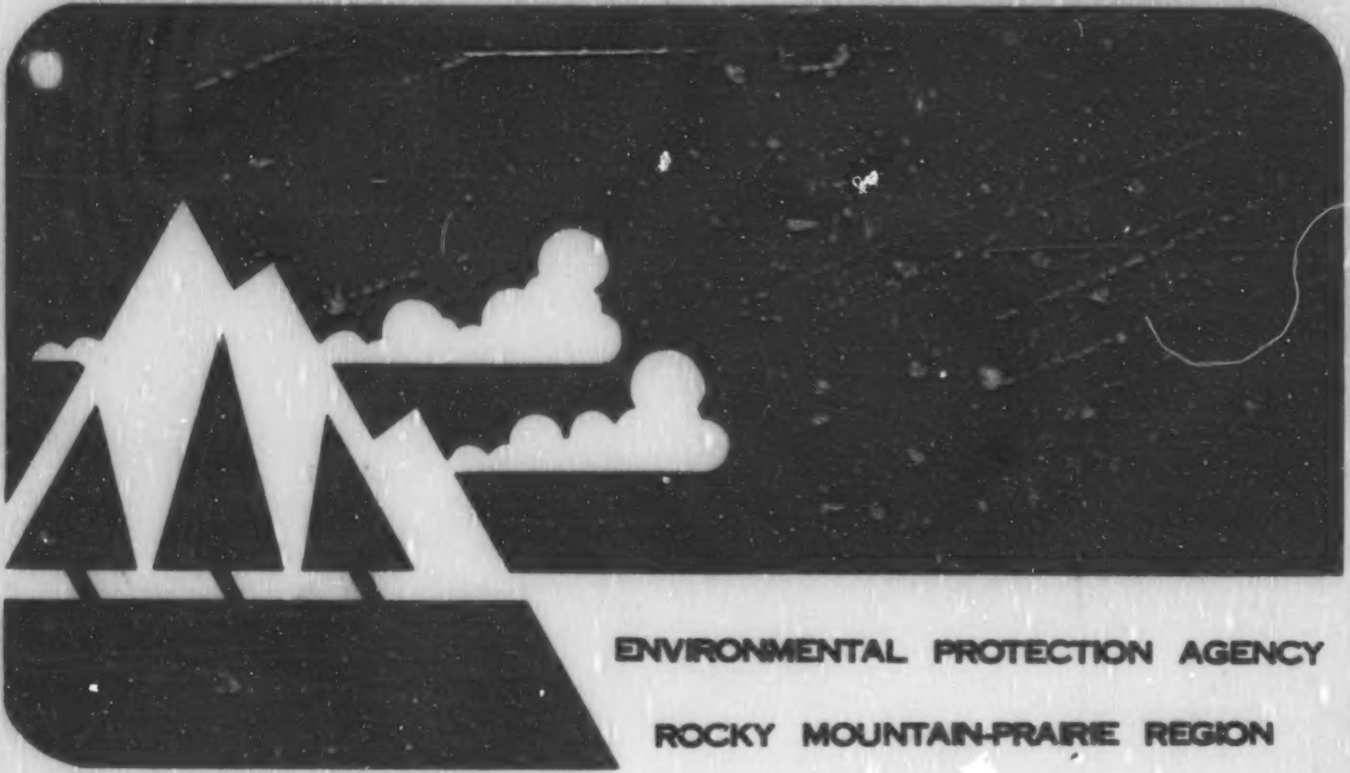
PB 255 246



ENVIRONMENTAL PROTECTION AGENCY

ROCKY MOUNTAIN-PRAIRIE REGION

REGION VIII

SOUTH PLATTE RIVER BASIN

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This report contains area maps and water quality baseline data for the South Platte River Basin. The Basin covers 350 main stem stream miles plus 469 tributary stream miles to the Colorado/Nebraska border.

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*Nebraska,

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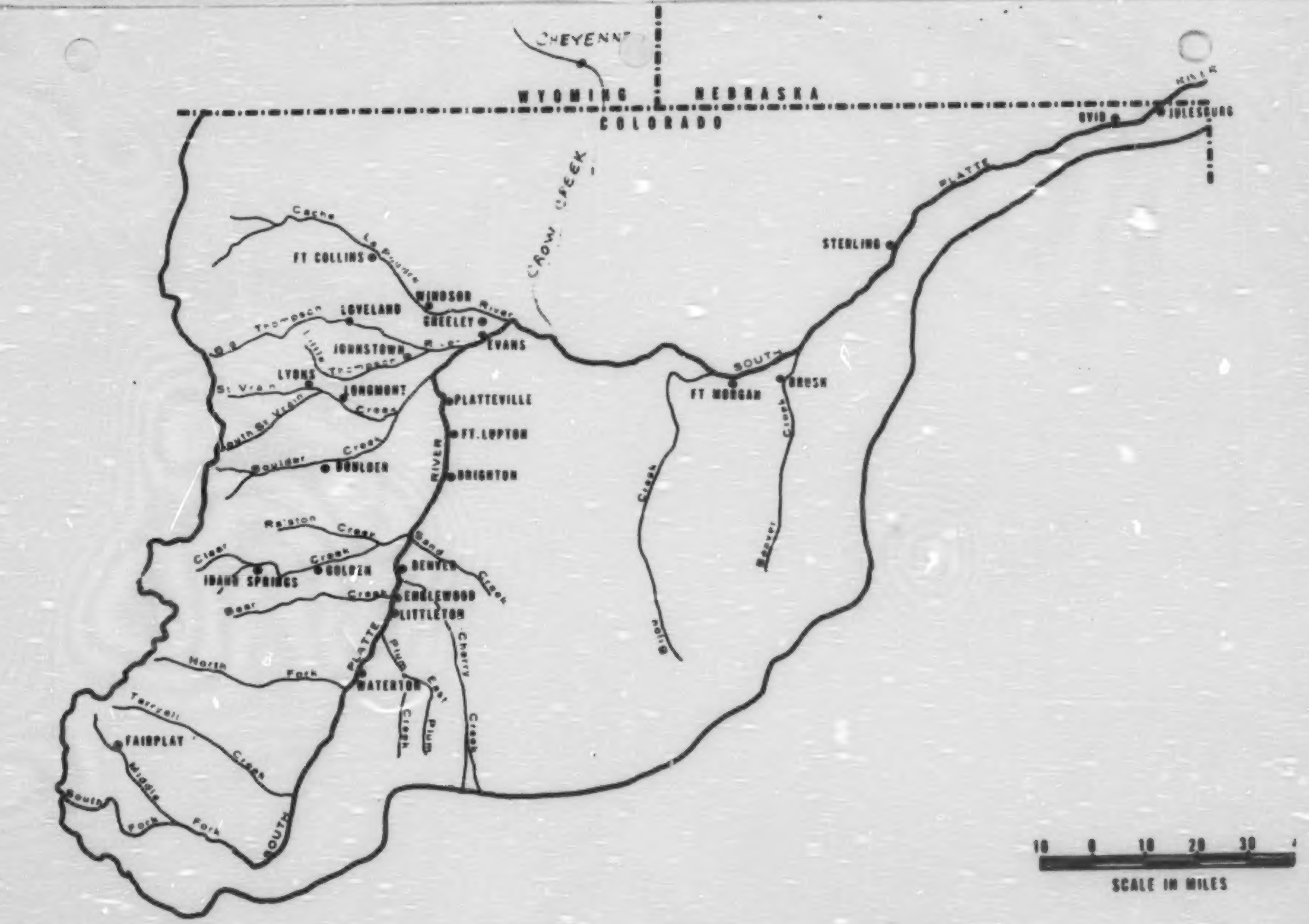
SECTION A

Narrative


CHEYENNE
WYOMING
NEBRASKA
COLORADO
CROW CREEK
RIVER
JULESBURG
OVID
PLATTE
STERLING
SOUTH
FT MORGAN
BRUSH
Beaver Creek
Bijou Creek
Cache La Poudre
FT COLLINS
WINDSOR
River
GREELEY
EVANS
LOVELAND
Thompson
JOHNSTOWN
River
Little Thompson
LYONS
LONGMONT
St Vrain
South St Vrain
Creek
Boulder Creek
BOULDER
PLATTEVILLE
FT. LUPTON
BRIGHTON
RIVER
Ralston Creek
Clear Creek
IDAHO SPRINGS
GOLDEN
DENVER
Sand Creek
ENGLEWOOD
Bear Creek
LITTLETON
Cherry Creek
Plum Creek
East Plum
PLATTE
WATERTON
North Fork
Tarryall Creek
FAIRPLAY
Middle Fork
South Fork
SOUTH
10 0 10 20 30 40
SCALE IN MILES

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SOUTH PLATTE RIVER BASIN ACCOMPLISHMENT PLAN

FIGURE 9

SP 1

I. Priority Area Identification

South Platte River Basin Accomplishment Plan for water quality - Headwaters to the Colorado/Nebraska border covering 350 main stem stream miles plus 469 tributary stream miles.

II. Problem Assessment

The Basin encompasses Denver and surrounding counties comprising the largest metropolitan area in Region VIII with a 1970 population of 1,067,000. In addition, it covers the fastest urbanizing area (the Front Range) in Colorado where the Denver Metropolitan Area had a 1971 growth rate of 3.4 percent.

a) The pressures for increased recreational uses of the stream and its impoundments makes the present standards inadequate; therefore, the present water use classification should be upgraded in a major portion of the basin.

b) The ambient water quality does not meet present water quality standards in or below the Denver Metropolitan Area. Of the 819 stream miles considered in this plan, 139 miles do not meet the existing standards under the worst conditions. (Another 243 miles would not meet the proposed standards.) In addition, the basin contains several tributaries with high quality water but relatively low total flows that are in areas of rapid development. Ambient quality in these tributaries is projected to fall below standards in the near future if steps are not taken now to protect these waters.

c) Present Colorado wastewater treatment plant standards are not adequate to meet ambient stream standards in most areas. In addition, adoption of the proposed state effluent standards would not be adequate in all cases to meet stream standards. Thus, the new effluent standards are not only inadequate in these cases but may, in fact, lead to confusion and delay when more stringent effluent restrictions must be applied.

d) The major wastes sources have been identified and in most cases a general plan for reduction has been developed. In the case of industrial pollution the major sources are the sugar beet processing plants, all of which have either signed commitment letters or are in the process of negotiating such letters. Other major industrial sources are Coors, Gates Rubber Company, and Continental Oil--all of which are under control program commitments. These actions will be converted immediately to an action requiring permits under the new legislation as soon as guidelines become available.

In the case of major municipal dischargers, the sources and loadings have been identified and action plans developed for both interim and long-term protection of the Basin's waters. In many situations construction grants programs along with operations and maintenance, and training programs are proposed as long-term solutions while the short-term solutions revolve around immediate improvements in the operation of the present facility through technical assistance, training and upgrading.

In some cases where present decisions will shape the way in which a large part of the entire system will develop over the long-run and where there are serious questions relating to regionalization, cost-effectiveness, or the need for area protection from potential growth problems, specific action plans are being deferred until the interim 3(c) outline is available. The 3(c) study has been underway since July 1971 and an interim outline is due by the second quarter of 1973. This outline is to be used as the basis for decisions related to funding long-term construction grants requests and interim measures to protect water quality until the projects are completed.

e) The single most important waste source and planning problem is the Denver Metro No. 1 wastewater treatment plant along with its contributors. The facility is presently overloaded and until expansion takes place there can be no long-term improvement in water quality. In the interim, however, improved O & M and effluent restrictions from contributing plants along with short-term improvement measures in the Metro Plant dealing with sludge removal and physical-chemical treatment can make substantial improvements in water quality.

f) Efforts to date indicate a need for continued operation, maintenance and training work with individual plants and the responsible state programs. As state resources become available these programs should be taken over almost in totality by the state.

g) An enforcement conference was held on the South Platte in November 1966. The conference proceedings are closed at the present time. However, if ongoing planning efforts are unsuccessful in getting voluntary compliance with interim operational and long-term construction measures adopted by the major dischargers, this conference will be reopened and potential corrective measures will be handled through this mechanism. With new legislation appropriate enforcement action will be implemented or implied through the permit program.

h) Several factors of special significance apply in this Basin. The Metro No. 1 problem has a Federal-State-City-Sewer District interrelationship that cannot be ignored. Denver Metro No. 1 is the product of a special sewer district. Several plants discharge primary effluent to interceptors that carry it to Metro No. 1 for further treatment. The plants have contracts with Metro No. 1 and they are represented on Metro's Board of Directors. Thus, changes in contracts on Metro operations must be approved by board members that may be adversely affected. There is also an interest in keeping and improving present primary plants rather than have one large facility for complete treatment. Another issue that must be resolved before final recommendations on the form of treatment can be made is the water rights issue. How much can Metro No. 1 consumptively use and how plant effluent may be exchanged with irrigation diversions so that relatively clean water may remain instream. Consumptive water use will also have other adverse environmental impacts downstream that must be considered.

i) It is possible that the Denver area must go to a complete recycling of effluent back to a municipal water supply. We should have a policy decision on whether or not a municipal water treatment plant following a wastewater treatment plant is acceptable and eligible for a wastewater treatment plant construction grant where the water processed would be used for non-potable purposes.

j) Non-point source pollution appears to be a significant factor in the ambient water quality conditions throughout the Basin but these sources were not dealt with in this plan in any great detail because of the lack of tools for correcting the problem. Urban runoff is dealt with in the most detail and should be considered in depth if grants for storm water treatment become available.

III. Agency Objectives

a) The water quality of the South Platte River Basin is to meet existing and proposed standards by July 1, 1976. Existing standards where inadequate are to be upgraded by July 1973.

b) During FY 1973 55,250 lbs. BOD are to be committed for reduction. An additional 93,300 BOD are to be committed for reduction in FY 74.

c) Immediate and visible reductions in pollution from specific industries polluting isolated but substantial stretches of the stream are to be accomplished by the last quarter of 1973.

d) Interim solutions for immediate reduction of pollution loads to the South Platte from municipal sources are to be implemented by the third quarter of 1973.

IV. Approach

The objectives outlined in Part III above are to be achieved through the time-phased efforts of several different programs within the Region. Coordination and updating of the program and reporting of the program accomplishments will be through the Air and Water Division, Planning Branch (PE 2B3149).

Achievement of pollutant reductions or commitments from municipal sources during this time period will require major inputs from: the Air and Water Division in the areas of water quality planning (PE 2B3149), standards review development and monitoring (PE 2B1143), construction grant assistance, review and inspection (2B 8162), and assistance and review of treatment plant operation and maintenance practices (2B 8163); the Surveillance and Analysis Division in the areas of technical support and analysis of treatment plant operation (PE 2B8163) and water quality surveillance storage (PE 2B2148). Lesser but still important and substantial inputs must come from: Air and Water Division's Manpower Development and Training Branch (PE 2B7160 and 7161), Program Grants Branch (2B4153), and the Interagency Assistance and Evaluation Branch, environmental impact assessment and review (PE 2B6117); the Public Affairs Division (PE 2B8316) and the Enforcement Division, Water Quality Enforcement (PE 3B1123). In the event that the overall strategy for voluntary compliance with the proposed water quality standards by municipal sources fails, the Enforcement Division may play an expanded role in a possible reopening of the enforcement conference.

Industrial source pollution problems will be dealt with Primarily through the Enforcement Division's Refuse Act Permit Branch (PE 3B2124) in cooperation with the Surveillance and Analysis Division's Surveillance Branch (PE 2B2148) and the Air and Water Division's Planning Branch (PE 2B3149).

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Primary coordination contacts outside of EPA include the Colorado State Department of Health, the City and County of Denver, the effected local sewer districts and governments, the Denver Board of Water Commissioner, the Larimer-Weld County Planning Commission, and the Denver Regional Council of Governments.

The general objectives to be met as outlined above consist of a combination of short-term, interim, and long-term goals and accomplishment dates. Early commitments and reductions will come primarily from past efforts by planning, construction grants operations and the environmental impact review groups along with past and current efforts of the enforcement, permits, and surveillance groups. These latter efforts include the immediate and highly visible clean up that will come from restrictions on isolated industries discharing enormous quantities of wastes to the stream resulting in intermittent but widespread stream degradation. Concurrent efforts in the Denver Metropolitan Area will be to formulate and initiate specific clean up actions based on the interim 3c water quality plan.

Interim and long-term solutions based upon operation and maintenance, upgrading of treatment facilities and operator training will be undertaken. The Denver Metro #1 wastewater treatment system, the largest single point discharge in the planning area, will be fully evaluated to determine the interim measures such as operation, maintenance, physical-chemical treatment, training, and system changes that might be made to improve the water quality until the long-term construction type measures are completed after commitments are received from the immediate, highly visible dischargers. The remaining metropolitan area dischargers, in order of established priority, will be addressed through the permits and surveillance programs. In all cases the priorities are established so as to focus the entire Regional effort on specific major problems that can be cleaned up and result in immediate and visible improvements in ambient water quality.

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SECTION B

Basin Load Summary

PRIORITY BASIN WORK SHEET

Date 9/72
STORET Minor Basin
ID No. 0910
Region VIII
State(s) Colorado - Wyoming

Name of Basin SOUTH PLATTE RIVER

1. Area covered:

BASIN SUMMARY

2. Water quality objectives:

Parameter	(a) Current criteria (see WQS) mg/l	(b) EPA Objective: Minimum Acceptable Ambient Level (See Table 4) mg/l	(c) Actual Level at Worst Time of Yr. (See Table 2) mg/l	Accuracy (% +) (Regional est.) ± %

See Reaches #1-5 on South Platte and Reach #1 and 2 on Cache La Poudre for applicable standards.

3. Estimated pollution load--all sources (average FY 72):

	Load (See Table 4) pounds/day	Accuracy (% ±) ± %
OD5	169,100	10

4. Estimated pollution load reduction required to meet EPA water quality objectives derived from 2(c) - 2(b):

	Required Reduction (≤ of Table 4) pounds/day	Accuracy (% ±) ± %
BOD_5	129,980	20

5. Reduction firmly committed by FY 72 and prior year actions:

Year of Actual Reduction

FY 73	FY 74	FY 75	FY 76
lbs/day	lbs/day	lbs/day	lbs/day
64,150	87,550	90,500	93,600

6. Additional reductions to be obtained by FY 73 and FY 74 commitments:

Year of Actual Reduction

FY 73	FY 74	FY 75	FY 76
lbs/day	lbs/day	lbs/day	lbs/day
1,550	13,500	20,250	63,000

(See Table 4)

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7. Increases in pollution discharges expected:

	Year of Actual Increase			
	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD$_5$	9.820	16.110	20,570	25,700

8. Total reductions to be obtained--sum of 5 and 6 above:

	Year of Actual Reduction			
	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD$_5$	65,700	101,050	110,750	156,600

9. Total reductions required--sum of 4 and 7 above:

	Year of Actual Reduction			
	FY 73	FY 74	FY 75	FY 76
	139,650	144,940	149,650	155,650
	lbs/day	lbs/day	lbs/day	lbs/day
BOD$_5$				

10. Year in which minimum acceptable water quality levels are to be achieved--compare 8 and 9 above: Fiscal Year 1976

11. If figures for items 2 through 7 above are not available, please provide estimate of when they will become available through monitoring and other activities:

Are items 3, 5, and 6 above derived from detailed discharger inventories?

Yes

12. Key pollutants, if any, for which a weight or other quantity measure is not appropriate:

(Note special problems and comments)

Figure 10 - Continued

3/6

PRIORITY BASIN WORK SHEET

Date 9/72
STORET Minor Basin ID No. 0910
Region VIII
State(s) Colorado - Wyoming

Name of Basin SOUTH PLATTE RIVER

1. Area covered:

HEADWATERS DOWNSTREAM TO BOWLES AVENUE

2. Water quality objectives:

Parameter	(a) Current criteria (see WQS) mg/l	(b) EPA Objective: Minimum Acceptable Ambient Level (See Table 4) mg/l	(c) Actual Level at Worst Time of Yr. (See Table 2) mg/l	Accuracy (% +) (Regional est.) ± %
D.O.	6	6	2.0	25
Fecal Coliform	1000/100 ml	100/100 ml	740/100 ml	25

3. Estimated pollution load--all sources (average FY 72):

	Load (See Table 4) pounds/day	Accuracy (% ±) + %
BOD_5	1100	10%
Fecal Coliform	740/100 ml in stream	

4. Estimated pollution load reduction required to meet EPA water quality objectives derived from 2(c) - 2(b):

	Required Reduction (≤ of Table 4) pounds/day	Accuracy (% ±) ± %
BOD_5	1100	10%
Fecal Coliform	640/100 ml in stream	

5. Reduction firmly committed by FY 72 and prior year actions:

Year of Actual Reduction

	FY 73 lbs/day	FY 74 lbs/day	FY 75 lbs/day	FY 76 lbs/day
BOD_5	250	250	250	250
Fecal Coliform	0	0	0	0

6. Additional reductions to be obtained by FY 73 and FY 74 commitments:

Year of Actual Reduction

	FY 73 lbs/day	FY 74 lbs/day	FY 75 lbs/day	FY 76 lbs/day
BOD_5	0	0	750	950
Fecal Coliform	0	640/100 ml		

(See Table 4)

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7. Increases in pollution discharges expected:

Year of Actual Increase

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	100	200	300	400
Fecal Coliform	0	0	0	0

8. Total reductions to be obtained--sum of 5 and 6 above:

Year of Actual Reduction

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	250	250	1000	1200
Fecal Coliform		640/100 ml		

9. Total reductions required--sum of 4 and 7 above:

Year of Actual Reduction

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	1200	1300	1400	1500
Fecal Coliform		640/100 ml		

10. Year in which minimum acceptable water quality levels are to be achieved--compare 8 and 9 above:
Goal is to have zero discharge to S. Platte. This goal cannot be attained by 1976, however, the goal will be strived for.

11. If figures for items 2 through 7 above are not available, please provide estimate of when they will become available through monitoring and other activities: Heavy metals discharge may be occurring periodicaly from Martin Marrietta's industrial waste facility.
Are items 3, 5, and 6 above derived from detailed discharger inventories?

Yes

12. Key pollutants, if any, for which a weight or other quantity measure is not appropriate:

(Note special problems and comments)

Figure 10 - Continued

PRIORITY BASIN WORK SHEET

Date 9/72
STORET Minor Basin
ID No. 0910
Region VIII
State(s) Colorado

Name of Basin SOUTH PLATTE RIVER

1. Area covered:

BOWLES AVENUE TO EXPOSITION AVENUE

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2. Water quality objectives:

Parameter	(a) Current criteria (see WQS) mg/l	(b) EPA Objective: Minimum Acceptable Ambient Level (See Table 4) mg/l	(c) Actual Level at Worst Time of Yr. (See Table 2) mg/l	Accuracy (% +) (Regional est.) ± %
D.O.	6.0	6.0	2.4	25%
Fecal Coliform	1000/100 ml	1000/100 ml	17,000/100 ml	25%

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3. Estimated pollution load--all sources (average FY 72):

	Load (See Table 4) pounds/day	Accuracy (% ±) ± %
BOD_5	8,150	10
Fecal Coliform	17,000/100 ml instream	

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4. Estimated pollution load reduction required to meet EPA water quality objectives derived from 2(c) - 2(b):

	Required Reduction (≤ of Table 4) pounds/day	Accuracy (% ±) ± %
BOD_5	4,000	25
Fecal Coliform	16,000/100 ml instream	

---

5. Reduction firmly committed by FY 72 and prior year actions:

Year of Actual Reduction

	FY 73 lbs/day	FY 74 lbs/day	FY 75 lbs/day	FY 76 lbs/day
BOD_5	5,500	6,300	6,900	7,700
Fecal Coliform	0	0	0	0

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6. Additional reductions to be obtained by FY 73 and FY 74 commitments:

Year of Actual Reduction

	FY 73 lbs/day	FY 74 lbs/day	FY 75 lbs/day	FY 76 lbs/day
BOD_5		250	350	1050
Fecal Coliform	0	0	0	16,000/100 ml

(See Table 4)

7. Increases in pollution discharges expected:

	Year of Actual Increase			
	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	1,300	2,350	3,300	4,500
Fecal Coliform	0	0	0	0

8. Total reductions to be obtained--sum of 5 and 6 above:

	Year of Actual Reduction			
	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	5,500	6,550	7,250	8,750
Fecal Coliform	0	0	0	16,000/100 ml

9. Total reductions required--sum of 4 and 7 above:

	Year of Actual Reduction				
	FY 73	FY 74	FY 75	FY 76	
	lbs/day	lbs/day	lbs/day	lbs/day	
BOD_5	5,300	6,350	7,300	8,500	+25%
Fecal Coliform	0	0	0	16,000/100 ml	

10. Year in which minimum acceptable water quality levels are to be achieved--compare 8 and 9 above:

1976

11. If figures for items 2 through 7 above are not available, please provide estimate of when they will become available through monitoring and other activities:

Are items 3, 5, and 6 above derived from detailed discharger inventories?

Yes

12. Key pollutants, if any, for which a weight or other quantity measure is not appropriate:

(Note special problems and comments)

Figure 10 - Continued

PRIORITY BASIN WORK SHEET

Date 9/72
STORET Minor Basin
ID No. 0910
Region VIII
State(s) Colorado

Name of Basin SOUTH PLATTE RIVER

1. Area covered:

Exposition Avenue to York Street (Data at York taken at Franklin St.)

2. Water quality objectives:

Parameter	(a) Current criteria (see WQS)	(b) EPA Objective: Minimum Acceptable Ambient Level (See Table 4)	(c) Actual Level at Worst Time of Yr. (See Table 2)	Accuracy (% +) (Regional est.)
	mg/l	mg/l	mg/l	+ %
D.O.	5.0	5.0	2.2	25%
Fecal Coliform	1000/100 ml	1000/100 ml	120,000/100 ml	25%

3. Estimated pollution load--all sources (average FY 72):

	Load (See Table 4) pounds/day	Accuracy (% ±)
		± %
BOD_5	1,000	10
Fecal Coliform	120,000/100 ml	

4. Estimated pollution load reduction required to meet EPA water quality objectives derived from 2(c) - 2(b):

	Required Reduction (≤ of Table 4) pounds/day	Accuracy (% ±)
		± %
Fecal Coliform	119,000/100 ml	10
BOD_5	300	

5. Reduction firmly committed by FY 72 and prior year actions:

Year of Actual Reduction

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	350	350	350	350
Fecal Coliform	0	0	0	0

6. Additional reductions to be obtained by FY 73 and FY 74 commitments:

Year of Actual Reduction

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	0	0	0	0
Fecal Coliform				119,000/100 ml

(See Table 4)

7. Increases in pollution discharges expected:

	Year of Actual Increase			
	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD$_5$	50	60	70	80
Fecal Coliform	0	0	0	0

8. Total reductions to be obtained--sum of 5 and 6 above:

	Year of Actual Reduction			
	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD$_5$	350	350	350	350
Fecal Coliform	0	0	0	119,000/100 ml

9. Total reductions required--sum of 4 and 7 above:

	Year of Actual Reduction			
	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD$_5$	350	360	370	380
Fecal Coliform	0	0	0	119,000/100 ml

10. Year in which minimum acceptable water quality levels are to be achieved--compare 8 and 9 above:

1976

11. If figures for items 2 through 7 above are not available, please provide estimate of when they will become available through monitoring and other activities:

Are items 3, 5, and 6 above derived from detailed discharger inventories?

Yes

12. Key pollutants, if any, for which a weight or other quantity measure is not appropriate:

(Note special problems and comments)

Figure 10 - Continued.

PRIORITY BASIN WORK SHEET

Date 9/72
STORET Minor Basin ID No. 0910
Region VIII
State(s) Colorado

ame of Basin SOUTH PLATTE RIVER

1. Area covered:

York Street to Henderson, Colorado

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2. Water quality objectives:

Parameter	(a) Current criteria (see WQS)	(b) EPA Objective: Minimum Acceptable Ambient Level (See Table 4)	(c) Actual Level at Worst Time of Yr. (See Table 2)	Accuracy (% ±) (Regional est.)
	mg/l	mg/l	mg/l	± %
D.O.	3.0	5.0	2.4	25%
Fecal Coliform		1000/100 ml	109,000/100 ml	25%

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3. Estimated pollution load--all sources (average FY 72):

	Load (See Table 4) pounds/day	Accuracy (% ±) ± %
BOD_5	44,000	20
ecal Coliform	109,000/100 ml instream	

---

4. Estimated pollution load reduction required to meet EPA water quality objectives derived from 2(c) - 2(b):

	Required Reduction (≤ of Table 4) pounds/day	Accuracy (% ±) ± %
BOD_5 (for 5.0 mg/l DO)	28,200	
Fecal Coliform	108,000/100 ml	

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5. Reduction firmly committed by FY 72 and prior year actions:

Year of Actual Reduction

	FY 73 lbs/day	FY 74 lbs/day	FY 75 lbs/day	FY 76 lbs/day
BOD_5	6700	6700	6700	6700
Fecal Coliform	0	0	0	0

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6. Additional reductions to be obtained by FY 73 and FY 74 commitments:

Year of Actual Reduction (See Table 4)

	FY 73 lbs/day	FY 74 lbs/day	FY 75 lbs/day	FY 76 lbs/day
BOD_5	0	0		33,100
Fecal Coliform	0	0	0	108,000/100 ml

7. Increases in pollution discharges expected:

	Year of Actual Increase			
	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	3,550	6,600	8,650	10,800
Fecal Coliform	0	0	0	0

8. Total reductions to be obtained--sum of 5 and 6 above:

	Year of Actual Reduction			
	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	6,700	6,700	6,700	39,800
Fecal Coliform	0	0	0	108,000/100 ml

9. Total reductions required--sum of 4 and 7 above:

	Year of Actual Reduction			
	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5 (5 mg/l DO)	31,750	34,800	36,850	39,000
	108,000/100 ml	108,000/100 ml	108,000/100 ml	108,000/100 ml

10. Year in which minimum acceptable water quality levels are to be achieved--compare 8 and 9 above: In order to achieve 5.0 mg/l DO below Denver Metro it will be necessary to go to lower than 10 mg/l BOD_5 in effluent, and to exchange some of Metro's effluent with irrigation diversions during low flow conditions in the S. Platte.

11. If figures for items 2 through 7 above are not available, please provide estimate of when they will become available through monitoring and other activities: Toxic metals in Clear Creek from mining wastes need to be monitored to see if they are problem.
Are items 3, 5, and 6 above derived from detailed discharger inventories?

Yes

12. Key pollutants, if any, for which a weight or other quantity measure is not appropriate:

(Note special problems and comments)

Figure 10 -- Continued.

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PRIORITY BASIN WORK SHEET

Date 9/72
STORET Minor Basin
ID No. 0910
Region VIII
State(s) Colorado

Name of Basin SOUTH PLATTE RIVER

1. Area covered:

Henderson, Colorado to the Nebraska State Line. (Does not include Cache La Poudre River Load).

2. Water quality objectives:

Parameter	(a) Current criteria (see WQS)	(b) EPA Objective: Minimum Acceptable Ambient Level (See Table 4)	(c) Actual Level at Worst Time of Yr. (See Table 2)	Accuracy (% ±) (Regional est.)
	mg/l	mg/l	mg/l	± %
DO	3.0	5.0	2.6	25%
Fecal Col.	--	1000/100 ml.	5,420,000/100 ml.	25%

3. Estimated pollution load--all sources (average FY 72):

	Load (See Table 4) pounds/day	Accuracy (% ±) ± %
BOD_5	74,100 lb.	15%

4. Estimated pollution load reduction required to meet EPA water quality objectives derived from 2(c) - 2(b):

	Required Reduction (% of Table 4) pounds/day	Accuracy (% ±) ± %
BOD_5	60,200	20

5. Reduction firmly committed by FY 72 and prior year actions:

Year of Actual Reduction

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	33,950	38,150	38,200	38,200

6. Additional reductions to be obtained by FY 73 and FY 74 commitments:

Year of Actual Reduction

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	500	12,200	16,750	22,550

(See Table 4)

7. Increases in pollution discharges expected:

Year of Actual Increase

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD$_5$	1,250	2,500	3,000	3,800

8. Total reductions to be obtained--sum of 5 and 6 above:

Year of Actual Reduction

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD$_5$	34,450	50,350	54,950	60,750

9. Total reductions required--sum of 4 and 7 above:

Year of Actual Reduction

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD$_5$	61,450	62,700	63,200	64,000

10. Year in which minimum acceptable water quality levels are to be achieved--compare 8 and 9 above:

11. If figures for items 2 through 7 above are not available, please provide estimate of when they will become available through monitoring and other activities:

Are items 3, 5, and 6 above derived from detailed discharger inventories?

12. Key pollutants, if any, for which a weight or other quantity measure is not appropriate:

(Note special problems and comments)

Figure 10 - Continued

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PRIORITY BASIN WORK SHEET

Date __________
STORET Minor Basin ID No. 0910
Region VIII
State(s) Colorado

(Reach #2)

Name of Basin SOUTH PLATTE RIVER

1. Area covered:

Cache La Poudre River Headwaters to Greeley Water Supply Diversion (Ted's Place)

2. Water quality objectives:

	(a) Current criteria	(b) EPA Objective: Minimum Acceptable Ambient Level	(c) Actual Level at Worst Time of Yr.	Accuracy (% ±)
		No Discharge		
Measure #1	mg/l	mg/l	mg/l	± %
Measure #2 DO	6	6	No W.Q. data	None
etc. Fecal Col.	1000/100 ml	1000/100 ml		
Temp.	70°F	70°F		

3. Estimated pollution load--all sources (average FY 72):

	Load	Accuracy (% ±)
Pollutant #1	pounds/day	± %
Pollutant #2 BOD_5	200	20%
etc. Fecal Colif.	0	

4. Estimated pollution load reduction required to meet EPA water quality objective derived from 2(c) - 2(b):

	Required Reduction	Accuracy (% ±)
Pollutant #1	pounds/day	± %
Pollutant #2 BOD_5	200	20%
etc. Fecal Colif.	Not Available	

5. Reduction firmly committed by FY 72 and prior year actions:

	Year of Actual Reduction			
	FY 73	FY 74	FY 75	FY 76
Pollutant #1	lbs/day	lbs/day	lbs/day	lbs/day
Pollutant #2 etc. BOD_5		Not Available		

6. Additional reductions to be obtained by FY 73 and FY 74 commitments:

	Year of Actual Reduction			
	FY 73	FY 74	FY 75	FY 76
Pollutant #1	lbs/day	lbs/day	lbs/day	lbs/day
Pollutant #2 BOD_5				
etc. Fecal Col.		200		

Figure 10. Priority Basin Work Sheet

14/16

7. Increases in pollution discharges expected:

	Year of Actual Increase			
	FY 73	FY 74	FY 75	FY 76
Pollutant #1	lbs/day	lbs/day	lbs/day	lbs/day
Pollutant #2 BOD$_5$	0	0	0	0
etc. Fecal Colif.	0	0	0	0

8. Total reductions to be obtained--sum of 5 and 6 above:

	Year of Actual Reduction			
	FY 73	FY 74	FY 75	FY 76
Pollutant #1	lbs/day	lbs/day	lbs/day	lbs/day
Pollutant #2				
etc.		200	200	200

9. Total reductions required--sum of 4 and 7 above:

	Year of Actual Reduction			
	FY 73	FY 74	FY 75	FY 76
Pollutant #1	lbs/day	lbs/day	lbs/day	lbs/day
Pollutant #2				
etc.		200	200	200

10. Year in which minimum acceptable water quality levels are to be achieved--compare 8 and 9 above: Water Quality Standards are assumed to be met at present time. No discharge policy to be implemented by FY 74.

11. If figures for items 2 through 7 above are not available, please provide estimate of when they will become available through monitoring and other activities: Modeling study of S.Platte to be available FY 1973 to determine waste reductions necessary.

Are items 3, 5, and 6 above derived from detailed discharger inventories? (Estimates from rough materials balance and flow calculations are acceptable.)

YES

12. Key pollutants, if any, for which a weight or other quantity measure is not appropriate:

Figure 10 - Continued

PRIORITY BASIN WORK SHEET

Date 9/72
STORET Minor Basin ID No. 0910
Region VIII
State(s) Colorado

Name of Basin SOUTH PLATTE RIVER

1. Area covered: Reach #1

Cache La Poudre River at Greeley Water Supply Diversion to S. Platte River.

2. Water quality objectives:

Parameter	(a) Current criteria (see WQS)	(b) EPA Objective: Minimum Acceptable Ambient Level (See Table 4)	(c) Actual Level at Worst Time of Yr. (See Table 2)	Accuracy (% ±) (Regional est.)
	mg/l	mg/l	mg/l	± %
D.O.	5/3*	5	2.8	25%
Fecal Coliform	1000/100 ml/No Std.	1000/100 ml.	490,000/100 ml.	25%
Temperature	90°F	90°F	76°F	10%

3. Estimated pollution load--all sources (average FY 72):

	Load (See Table 4) pounds/day	Accuracy (% ±) ± %
BOD_5	40,550	10%
Fecal Coliform	4.9 x 10^5/100 ml in stream	

4. Estimated pollution load reduction required to meet EPA water quality objectives derived from 2(c) - 2(b):

	Required Reduction (≤ of Table 4) pounds/day	Accuracy (% ±) ± %
BOD_5	35,980	20
Fecal Coliform.	4.89 x 10^5/100 ml	

5. Reduction firmly committed by FY 72 and prior year actions:

Year of Actual Reduction

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	17,400	35,800	38,100	40,400
Fecal Coliform	2 x 10^5	4 x 10^5	4 x 10^5	4 x 10^5/100 ml.

6. Additional reductions to be obtained by FY 73 and FY 74 commitments:

Year of Actual Reduction (See Table 4)

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	1,050	1,050	1,200	5,150
Fecal Col.	[illegible]		2 x 10^3	4.89 x 10^5/100 ml.

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7. Increases in pollution discharges expected:

Year of Actual Increase

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	3,570	4,400	5,250	6,120
Fecal Colif.	0	0	0	0

8. Total reductions to be obtained--sum of 5 and 6 above:

Year of Actual Reduction

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	8,450	36,850	40,300	45,550
Fecal Colif.	2×10^5/ 100 ml.	4×10^5/ 100 ml	4.2×10^5	4.89×10^5/ 100 ml.

9. Total reductions required--sum of 4 and 7 above:

Year of Actual Reduction

	FY 73	FY 74	FY 75	FY 76
	lbs/day	lbs/day	lbs/day	lbs/day
BOD_5	39,550	40,380	41,230	42,100
Fecal Colif.	4.89×10^5/100 ml--	----------	----------	--------

10. Year in which minimum acceptable water quality levels are to be achieved--compare 8 and 9 above:

1976

11. If figures for items 2 through 7 above are not available, please provide estimate of when they will become available through monitoring and other activities:

Are items 3, 5, and 6 above derived from detailed discharger inventories?

Yes

12. Key pollutants, if any, for which a weight or other quantity measure is not appropriate:

(Note special problems and comments)

Figure 10.- Continued

SECTION C

Planned Accomplishments

PLANNED ACCOM IMENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title Federal Activites/Wtr 5. Geographical Area Title S. Platte River Basin	3. Sub-Element No. 2B6116 6. Geo. Area Code
		4. Sheet No. 1/1 7. Priority

75	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
.5	.5	▨	1	Continuing	Ensure adequate control at Federal facilities now meeting Stds. & at new facilities.
.5	.5	▨	2	5/74	Work toward getting Federal facilities connected to municipal facilities where possible.

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a. 0.0833	b.	a. 0.0833	b.			

Planned Accomplishments

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PLANNED ACCOMPL. .IMENTS SCHEDULE

1. Type of Plan
a. ☐ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title Environmental Impact Statement Review/Wtr.

3. Sub-Element No. 3B6117-08

4. Sheet No. 1/1

5. Geographical Area Title

6. Geo. Area Code

7. Priority

73	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
-	2.4	▨	1	8/73	Review S. Platte Basin W.Q. Management Plan
.4	2.0	▨	2	8/73	" DRCOB " " " "
—	2.4	▨	3	8/73	" Larimer-Weld " " " "
.7	.7	▨	4	6/76	" project plans for major MWWTP in Basin
3.0	3.0	▨	5	6/73	" " " " 100 minor MWWTP in Basin
.02	.02	▨	6	6/73	Ensure that DRCOG3(c) plans addres environmental issues of reuse of
		▨			Denver Metro wastewater.
.4	1.0	▨	7	2/76	Develop strategy for Olympics
2.4	—	▨	8	12/72	Review Environmental Assessment & prepare EIS for Upper Thompson Sanitary
6.92	11.5	▨			District Project
		▨		1	
		▨			
		▨			
		▨			
		▨			

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a.	b.	a.	b.			

Planned Accomplishments

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PLANNED ACCOMPL. MENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title Wtr. Qual. Enforcement	3. Sub-Element No. 3B1123-08	4. Sheet No. 1 of 2
	5. Geographical Area Title S. Platte River Basin	6. Geo. Area Code	7. Priority

73	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
-	4.0		1	8/73	Review S. Platte Basin fully developed W.Q. Plan
0.3	—		2	11/72	Publish results of 1971-1972 DFIC S. Platte Survey
10.0	[illegible]		3	6/73	Use enforcement actions as necessary if no actions are taken on local level
—	3.5		4	8/73	Review DRCOB W.Q. management plan
0.5	0.5		5	6/73	Assist Larimer-Weld Co. in preparing W.Q. management plan and review plan.
4.0	—		6	12/73	Influence State to adopt adequate permit program
5.0	—		7	3/73	Prove applicability of RAPP to industrial dischargers to inadequate MWWTP
20	—		8	3/73	Develop interim measures to eliminate Denver Northside WWTP by passing raw sewage to S. Platte
4.0	—		9	6/73	Meet with Denver Metro officials to get committment for expanded plant effluent to meet reclassified S. Platte stream loading requirements
40	—		10	7/73	Meet with Denver Metro officials to upgrade plant operation
.3	-		11	6/73	Investigate "no discharge" at the Ft. St. Vrain Nuclear Power Plant
1.0	-		12	1/73	Get disinfection equipment operating at Longmont MWWTP
31.1	[illegible]				

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a.	b.	a.	b.			

Planned Accomplishments

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PLANNED ACCOMPL. AMENTS SCHEDULE

1. Type of Plan
a. ☒ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title Wtr. Qual. Enforcement

3. Sub-Element No. 3B1123-08

4. Sheet No. 2/2

5. Geographical Area Title S. Platte River Basin

6. Geo. Area Code

7. Priority

73	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
3.0	2.0	▨	13	11/73	Develop 180 day notice* against Sterling
.5	—	▨	14	10/72	Follow up 180 day notice* on Great Western at Ovid
.5	—	▨	15	10/72	" " " " "* " " " " Greeley
220	220	▨	16	6/76	Conduct water quality surveys for enforcement actions.
[illegible]	240	▨			
511	264				

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	15. Approved for RPIO
a. 4.75	b.	a. 5.42	b.			

Planned Accomplishments 28<

* These actions will be changed to permit actions immediately under the new legislation as soon as guidelines are available.

PLANNED ACCOMPL .HMENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title Refuse Act Permits	3. Sub-Element No. [illegible]	4. Sheet No. 1/2
	5. Geographical Area Title Platte River Basin	6. Geo. Area Code	7. Priority

73	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
45		▨	1	12/72	Obtain voluntary letters of Committment * from maj. ind. dischargers in Basin
2.0		▨	2	11/72	" " " " " " E. I. Dupont
2.0		▨	3.	11/72	" " " " " " Martim Marietta
2.0		▨	4	12/72	" " " " " " Gates Rubber Co.
2.0		▨	5	12/72	" " " " " " Public Serv. Co-Arapaho Sta
2.0		▨	6	10/72	" " " " " " " " " Cherokee St
2.0		▨	7	1/73	" " " " " " American Smelting & Refining
2.0		▨	8	12/72	" " " " " " Continental Oil Co.
2.0		▨	9	10/72	" " " " " " Amer. Metals Climax
2.0		▨	10	12/72	" " " " " " Adolph Coors Co.
2.0		▨	11	12/72	" " " " " " Cotter Corporation
6.0		▨	12	3/73	" " " " " " 9 Great Western Sugar Co. Plants
2.0		▨	13	11/72	" " " " " " Dow Chem Co. (USAEC Plant)
2.0		▨	14	11/72	" " " " " " Allied Chemical Co.
2.0		▨	15	10/72	" " " " " " Public Service Co. - Valmont & St. Vrain
		▨			

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO	
a. 2.43	b. 1.03	a.	b.				45

Planned Accomplishments

* These actions will be converted immediately to an action program for permits as soon as guidelines for permits are available.

PLANNED AC[illegible]IPL. [illegible]MENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title Refuse Act Permits	3. Sub-Element No.: 2B2124-08	4. Sheet No. 2/2
	5. Geographical Area Title S. Platte River Basin	6. Geo. Area Code	7. Priority

73	74	8. Code	9. No.	10 Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
2.0			16	8/72	Obtain voluntary letters of Committment from Huskey Oil. Co.
.5			17	3/73	Apply RAPP to industry discharging to Ft. Morgan MWWTP
.5			18	3/73	" " " " " " Brush "
.5			19	3/73	" " " " " " Sterling "
.2			20	3/73	" " " " " " Greeley "
20	50		21	1/75	Process minor industrial dischargers in Basin
.1			22	6/73	Investigate consolidation of industrial dischargers in Denver Metro Area
1.0	1.0		23	1/74	Get voluntary Committments* for sand & gravel operations in Clear Creek area to meet effluent standards
.2	.2		24	1/75	Develop committment letter* for Ft. Collins Power & Light to reduce heated effluent discharge
.2	.2		15	1/75	Investigate permit conditions & control for gravel & paving Co. inCache La Poudre area
22	10		16	continuous	Conduct sampling program of various industrial waste discharges to ensure compliance with vol. reduct. committments
[illegible]	71.9				
72.2	71.4				

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a. 6.01	b.	a. 5.95	b.			

Planned Accomplishments

* These actions will be converted immediately to an action program for permits as soon as guidelines for permits are available.

30a

PLANNED ACCOMPLISHMENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title General/Req. Counsel		3. Sub-Element No. 3R1127	4. Sheet No. 1/1
	5. Geographical Area Title S. Platte River Basin		6. Geo. Area Code	7. Priority

73 | 74
.5 | —

8. Code	9. No.	10 Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
▨	1	4/73	Review Metro Denver Service contracts for deficiencies & recommend
▨			changes to Metro Denver

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a. 0.0417	b.	a.	b.			

Planned Accomplishments

PLANNED ACCOMPLISHMENTS SCHEDULE.

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title W.Q. Standards	3. Sub-Element No. 2B1143-08	4. Sheet No. 1/2
	5. Geographical Area Title	6. Geo. Area Code	7. Priority

73	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
1.5	—		1	6/73	Utilize S. Platte Basin Math Model in assisting State to prepare Basin w.q. mgt. plan.
—	4.0		2	6/76	Continue to utilize S. Platte Basin Model in evaluating effectiveness of Basin w.q. mgt. implementation efforts in conjunction with State.
.2			3	10/72	Influence State to upgrade stream classifications
.3			4.	3/73	Review State stream reclassifications
.3			5	12/73	Influence State to adopt proposed minimum effluent standards
.05			6	11/72	*Influence State to reclassify S. Platte Hdwtrs. to Bowles as B-3 (Body Contact Recreation)
.2	.5		7	12/73	Investigate nutrient removal needs for Hdwtrs.-Bowles Reach.
1.2			8	6/73	Meet with Denver Metro officials & get effluent committment for planned expansion to meet proposed stream reclassification standards.
.1	.1		9	7/73	*Assist Larimer-Weld Co. Planning Comm. in using S. Platte model in preparing & evaluating implementation of area wide plan.
3.8	4.6				

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a.	b.	a.	b.			

Planned Accomplishments

* Included in Basin Summary Manpower Requirements.

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PLANNED ACCOMPL. AMENTS SCHEDULE

1. Type of Plan
a. ☒ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title W.Q. Standards

3. Sub-Element No. 2B1143-08

4. Sheet No. 2/2

5. Geographical Area Title S. Platte Basin

6. Geo. Area Code

7. Priority

3	74	8. Code	9. No.	10 Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
5	—		10	6/73	Work with States to get Crow Creek classified in Wyoming & Colorado
2	—		11	1/73	Investigate with State & local officials the upgrading of the Cache
					La Poudre to a ColdWater Fishery from Ft. Collins to Greeley.
—	1.4		12	7/73	Determine stream loadings from regional & basin plan & use this data
					to evaluate against existing WWTP effluents.
0.5	—				Monitor S. Platte Basin Model Study now underway.

2.2	1.4	12. FY 1973		13. FY 1974	14. Prepared by & Date	15. Reviewed by & Date	16. Approved forRPIO
6.0	6.0	a. 0.5	b.	a. 0.5 b.			

PLANNED ACCOMPL. .INENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title Spill prevention and response	3. Sub-Element No. 2B1144	4. Sheet No. 1/1
	5. Geographical Area Title S. Platte River Basin	6. Geo. Area Code	7. Priority

75	74	8. Code	9. No.	10 Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
1.5	1.5	▨	1	6/76	Investigate primary oil spills
.5	.5	▨	2	7/74	Coordinate inventory of source location prepared by Denver Metro mutual aid group
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12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a. 0.1667	b.	a. 0.1667	b.			

Planned Accomplishments

PLANNED ACCO[illegible]. IMENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title Wtr. Qual. Monitoring	3. Sub-Element No. 2B2147	4. Sheet No. 1/1
	5. Geographical Area Title S. Platte River Basin	6. Geo. Area Code	7. Priority

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8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
▨	1	8/73	Develop Cooperative long-term monitoring program with State for entire basin.
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40 05

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a. 0.333	b.	a. 0.04	b.			

Planned Accomplishments

PLANNED ACCOMPLISHMENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title Wtr Poll Source Surv.	3. Sub-Element No. 2[illegible]43	4. Sheet No. 1/1
	5. Geographical Area Title S. Platte River Basin	6. Geo. Area Code	7. Priority

73	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
–	60	▨	1	6/76	Conduct in stream studies of water quality to determing effect of specific abatement actions.

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a. 0.0	b.	a. 0.5	b.			

PLANNED ACC PL. MENTS SCHEDULE

1. Type of Plan
a. ☒ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title W.Q. Planning

3. Sub-Element No. 2B3149-08

4. Sheet No. 1/6

5. Geographical Area Title S. Platte River Basin

6. Geo. Area Code

7. Priority

72	74	8. Code	9. No.	10. SchedDate of Comp.	11. PLANNED ACCOMPLISHMENTS
1.0	—		1	6/73	Influence State to produce fully developed Basin Plan
1.0	—		2	6/73	Provide planning assistance to State WPCD staff
2.1	—		3	6/73	Provide DRCOG 3(c) study material & S. Platte Basin Model info available to State & help them use it in preparing & evaluating W.Q. mgt. plans
—	4.0		4	8/73	Review fully developed S. Platte Basin Plan
6.0	5.0		5	8/73	Monitor & review DRCOB 3(c) Study
0.3			6	6/73	Insure DRCOG 3(c) study examines Denver water reuse plan
1.9			7	6/73	*Monitor DRCOG 3(c) study for tixic industrial WWTP development
.02			8	6/73	*Investigate consolidation possibilities of industrial waste discharges in Metro Denver area in DRCOG 3(c) plan.
.25			9	6/73	*Insure regionalization questions for Clear Creek area adequately handled in 3(c) study.
.25			10	6/73	*Ensure that DRCOG 3(c) plan looks at regionalization potential in Broomfield & Westminster area.
1.5			11	6/73	Assist Larimer-Weld County Planning Commission to develop area wide plan
12.9	9.0				

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a.	b.	a.	b.			

* Included in Basin Summary Manpower Requirements
Planned Accomplishments

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PLANNED ACCO..PL. .MENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title W.Q. Planning		3. Sub-Element No. 283149-0B	4. Sheet No. 2/6
	5. Geographical Area Title S. Platte River Basin		6. Geo. Area Code	7. Priority

B A	8. Code	9. No.	10 Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
- 5.0	▨	12	8/73	Review Larimer-Weld County Planning Commission W.Q. mgt. plan
.02	▨	13	10/72	Monitor DRCOG's interim plan revision
2.0	▨	14	11/72	Review " " " "
.1	▨	15	6/73	*Insure DRCOG Interim Plan Addendum addresses itself to mountainous areas
1.5	▨	16	12/72	*Evaluate & approve Evergreen WWTP site application in DRCOG interim plan
2.0	▨	17	3/73	*Develop & recommend interim measures for Denver Northside WWTP for DRCOG
	▨			interim plan addendum
*	▨	18	1/73	*Ensure Golden interceptor to Metro is adequately covered in DRCOG
	▨			interim plan addendum.
0.9 —	▨	19	6/73	Influence State to designate S. Platte Basin high priority area
0.1	▨	20	6/73	Get results of HUD-DRCOG Lakewood utility district consolidation study
	▨			used in preparation of DRCOG W.Q. Management Plan. (SEE # 47348 for additional [illegible] here.)
1.05 →	▨	21	2/73	Release results of EPA utility management study of Metropolitan Denver area
1.0 1.1	▨	22	6/76	Support Denver Water Board & Metro Denver in their planning for reuse
	▨			of water
6.1 6.75				

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a.	b.	a.	b.			

Planned Accomplishments

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PLANNED ACCOMPL. .IMENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title W.Q. Planning	3. Sub-Element No. 2B3149-08
		4. Sheet No. 7/6
	5. Geographical Area Title S. Platte River Basin	6. Geo. Area Code
		7. Priority

B	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS	
1.0	1.0		23	1/75	Investigate use of No Discharge Policy (land disposal) for Hdwtrs. to	✓
			b		Bowles Reach	
.2	.02		24	6/76	Support Tri-County Health Department Effluent Standards	✓
.5	.5		25	6/76	Maintain close review of Mt. Carbon Dam on Bear Creek	✓
.2	-		26	6/73	Develop program to assist City of Denver in locating & controlling	✓
					illegal point sources in City	
.05	—		27	6/73	Make recommendations for S. Lakewood connection to Metro Denver for	✓
					DRCOG 3(c) study	
.02	.02		28	1/74	Furnish toxic industrial waste disposal data to Categorical Programs	✓
.2	.2		29	6/73	Investigate water rights exchange between Burlington Ditch & Metro Denver	✓
					stream W.Q.	
.4	—		30	1/73	Investigate with State & Federal wildlife agencies on stream W.Q. req.	✓
					in order to maintain warm water fishery in S. Platte below Metro Denver.	
1.0			31	6/73	Insure that Engineering study for Metro Denver plant expansion includes	—
					Denver Northside WWTP	
3.39	1.74					

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a.	b.	a.	b.			

Planned Accomplishments

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PLANNED ACCO. L. .MENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title W.Q. Planning	3. Sub-Element No. 2B3149-08	4. Sheet No. 4/6
	5. Geographical Area Title S. Platte River Basin	6. Geo. Area Code	7. Priority

73	74	8. Code	9. No.	10 Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
1.0	—	▨	32	6/73	Meet with Denver Metro officials & get firm committment for effluent
		▨			quality from planned plant expansion
1.0	—	▨	33	1/73	Meet with Metro officials & get them to operate the existing facility
		▨			for maximum effluent quality rather than minimum plant operational costs
.05	.05	▨	34		Work with local Clear Creek political powers & environmental groups to
		▨			get Clear Creek recreational potential developed
1.0	0.5	▨	35	7/73	*Assist Larimer-Weld Co. Planning Commission in use of S. Platte Basin
		▨			model in preparing Areawide W.Q. plan
*.15	.02	▨	36	10/73	*Ensure DRCOG 3(c) study looks at Coal Creek regionalization potential
.15	—	▨	37	1/73	Monitor development of interim plan for Estes Park area.
*.05		▨	38	8/72	*Hold pre-app., pre-const. meeting with Cheyenne
*.05		▨	39	3/73	* " " " " " Ft. Morgan
*.05		▨	40	3/73	* " " " " " Brush
*.05		▨	41	3/73	* " " " " " Sterling
*.05		▨	42	1/74	* " " " " " Windsor
3.20	.51				

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIC
a.	b.	a.	b.			

Planned Accomplishments

PLANNED ACCOMPL. .MENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title W.Q. Planning	3. Sub-Element No. 283149-08
		4. Sheet No. 5 of 6
	5. Geographical Area Title S. Platte River Basin	6. Geo. Area Code
		7. Priority

73	74	8. Code	9. No.	10 Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
*.05			43	6/73	*Hold pre-app., pre-consi..meeting with Ft. Collins & Boxelder San. Dist.
	*.05		44	3/74	* " " " " " Greeley
1.0			45	7/73	*Monitor Larimer-Weld Area W.Q. Plan development
.1			46	7/73	*From Larimer-Weld Area W.Q. Plan & S. Platte Basin plan determine
					allowable stream loadints & WWTP requirements
1.3			47	2/73	Monitor ongoing EPA Utility Mgt. Study in DRCOG area.
.2			48	2/73	Hold seminar on " " " " " " "
.05					Review Metro Denver Service Contracts & recommend changes to Metro Denver
2.5	6.0		49	6/76	Construction Grant project review of major MWWTP in Basin
[illegible]	6.0		50	6/76	" " " " " minor " " "
—	*.05		51	3/74	*Hold pre-application, Pre-const. Grant Meeting with Castlerock
*.02	—		52	3/73	*Review Evergreen WWTP grant application
.1	—		53	3/73	Hold preapplication, pre-const. meeting with Littleton & Englewood on
					new regiona: interceptor & Englewood plant expansion.
	*.05		54	3/74	*Hold pre-const., pre-appl. meeting with S. Adams San. Dist.
[illegible]	10.0				

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for EPIO
a.	b.	a.	b.			

Planned Accomplishments

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PLANNED ACCOMPL. .MENTS SCHEDULE

1. Type of Plan
a. ☒ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title W.Q. Planning

3. Sub-Element No. 2B3149-08

4. Sheet No. 6/6

5. Geographical Area Title S. Platte River Basin

6. Geo. Area Code

7. Priority

13	74	8. Code	9. No.	10 Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
-	.35		55	12/73	*Hold pre-app., pre-const. meeting with Brighton
0	0		56	1/75	* " " " " " Ft. Lupton
.05	-		57	6/73	* " " " " " Boulder
.05	.05		58	6/73	* " " " " " Longmont
20	35		59	6/76	Monitor and implement S. Platte River Basin Accomplishment Plan Program
					(coordinating agency efforts).

20	2.5	12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
3.0	2.9	a. 3.00	b.	a. 2.49	b.			

Planned Accomplishments

42s

PLANNED ACCOMPLISHMENTS SCHEDULE

1. Type of Plan
a. ☒ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title Wtr. Pollution Cont. Agency Grants

3. Sub-Element No. 284153

4. Sheet No. 1/1

5. Geographical Area Title S. Platte River Basin

6. Geo. Area Code

7. Priority

73	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
10	–	▨	1	12/73	Influence State to adopt proposed effluent standards
1.0	1.1	▨	2	6/76	Condition State program assistance to gain State condurrance with
		▨			essential S. Platte Basin Accomplishment Plan Items
.4	.5	▨	3	9/73	Influence State to modify Const. Grants priority system
.2	.2	▨	4	12/73	Influence State to review 1-5 year needs list
.5	.5	▨	5	12/73	" " " adopt permit program
		▨			
[illegible]	–	▨	6	1/72	[illegible]

23	23	12. FY 1973	13. FY 1974	14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
		a. 0.19 b.	a. 0.19 b.			

PLANNED ACCOMPLISHMENTS SCHEDULE

1. Type of Plan a.☒ Sub-Element b.☐ Part. Sub-Elem. c.☐ Geo. Area	2. Program Sub-Element Title Tech. support & Assist Water		3. Sub-Element No: 2B5154	4. Sheet No. 1/1
	5. Geographical Area Title		6. Geo. Area Code	7. Priority

73	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
2.0			1	6/73	Develop program to assist City of Denver in determing & controlling illeagal point sources in the city.
	3.0		2	10/73	Develop in cooperation with State and Federal Agencies the required minimum streamflow to maintain fish & other desirable aquatic life in S. Platte - Exposition to Henderson Reach
	1.0		3	10/74	Conduct W.Q. Study of Lake Estes through National Lake Eutrop. Study

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a. 0.1167	b.	a. 0.333	b.			

Planned Accomplishments

PLANNED ACCOMPL. .IMENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title Operator Training/Wtr
	3. Sub-Element No. 2B7150
	4. Sheet No. 1/1
	5. Geographical Area Title
	6. Geo. Area Code
	7. Priority

73	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
.5	2.0	▨	1	6/76	Continue training support, provide training for operators at plant
.02		▨	2	6/73	(1) Ft. Morgan
.02		▨	3	6/73	(2) Brush
.02		▨	4	6/73	(3) Sterling
.5		▨	5	11/72	Monitor 5(g)(1) training courses for MWWTP operators in Ft. Collins & Greeley area
.5		▨	6	3/73	Monitor 5(g)(1) training course for Denver Northside MWWTP
.2	.2	▨	7	6/76	Coordinate field study training program for MWWTP operators

		12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
176	22	a. 0.15	b.	a. 0.18	b.	45≤		

Planned Accomplishments

PLANNED ACCOMPL. IMENTS SCHEDULE

1. Type of Plan
a. ☒ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title Direct Training/Wtr

3. Sub-Element No. 2B7160

4. Sheet No. 1/1

5. Geographical Area Title S. Platte River Basin

6. Geo. Area Code

7. Priority

73	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
1.5	1.5		1	6/76	Survey MWWTP with O & M Survey Team to determine plant staff training needs
.08			2	6/73	(1) Englewood
.08			3	6/73	(2) Brighton
.08			4	12/72	(3) Brush
.08			5	12/72	(4) Sterling
.08			6	12/72	(5) Ft. Collins
.08			7	6/73	(6) Windsor
.08			8	12/73	(7) Greeley

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a. 0.125	b.	a. 0.125	b.	46<		

Planned Accomplishments.

PLANNED ACCOMPLISHMENTS SCHEDULE

1. Type of Plan
a. ☒ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title Manpower Planning/Mtr

3. Sub-Element No. 2B7161

4. Sheet No. 1/1

5. Geographical Area Title S. Platte River Basin

6. Geo. Area Code

7. Priority

73	74	8. Code	9. No.	10 Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
1.0	2.0	▨	1	6/76	Provide assistance to the states for developing manpower planning functions in employment and training

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a. 0.0833	b.	a. 0.1667	b.	4/76		

Planned Accomplishments

PLANNED ACCOMPLISHMENTS SCHEDULE

1. Type of Plan
a. ☒ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title Const. Grants Operations

3. Sub-Element No. 2B8162

4. Sheet No. 1/5

5. Geographical Area Title S. Platte River Basin

6. Geo. Area Code

7. Priority

73	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
	.2		1	8/73	Review S. Platte Basin W.Q. Mgt. Plan
.1	.5		2	8/73	" DRCOG " " "
	.2		3	8/73	" Larimer-Weld " " "
0.1			4	6/73	Assist " " in preparing W.Q. Mgt. Plan
			[illegible]	6/76	Hold pre-application/pre-construction grant meetings for major MWWTP grants
					in S. Platte Basin
–	.5		6	3/74	(1) Castlerock
0.5			7	10/72	(2) Evergreen Sanitary District
0.5			8	3/73	(3) Littleton-Englewood
.3			9	1/73	(4) Denver Metro S. Platte Interceptor #2
0.5			10	6/73	(5) Denver Metro
	1.5		11	3/74	(6) S. Adams
	.5		12	12/73	(7) Brighton
–	–		13	1/75	(8) Ft. Lupton
0.5			14	6/73	(9) Boulder
2.5					
2.4					

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a.	b.	a.	b.	48<		

Planned Accomplishments

* Included in Basin Summary Manpower Requirements

PLANNED ACCOMPL. IMENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title Constr. Grants Op.
	5. Geographical Area Title S. Platte River Basin
3. Sub-Element No. 2B8162	4. Sheet No. 2/5
6. Geo. Area Code	7. Priority

72	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS	
2.5	—		15	6/73	(10) Longmont	✓
	.5		16	1/74	(11) Cheyenne	✓
.2			17	3/73	(12) Ft. Morgan	✓
.1			18	3/73	(13) Brush	✓
.1			19	3/73	(14) Sterling	✓
.2			20	6/73	(15) Ft. Collins & Boxelder Sanitary District	✓
—	.5		21	1/74	(16) Windsor	✓
	.5		22	1/74	(17) Greeley	✓
				Date Grant to be Awarded.		
3.9	6.0		23		Make Const. Grant to major MWWTP in S. Platte Basin	
			24	6/74	(1) Castle Rock	✓
	0.3*		25	7/73	(2) Evergreen	✓
.3*	.5*		26	3/73	(3) Littleton-Englewood	✓
.2	.1		27	1/73	(4) N.E. Capitol Improvement Project	✓

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a.	b.	a.	b.	49<		

5.0 7.5

Planned Accomplishments

PLANNED ACCOMPL. IMENTS SCHEDULE

1. Type of Plan
a. ☒ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title Constr. Gr. Op.

3. Sub-Element No. 2B8162

4. Sheet No. 3/5

5. Geographical Area Title S. Platte River Basin

6. Geo. Area Code

7. Priority

	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
			Date grant to be awarded	
.3+ .1?		28	4/73	(5) Interim measures to eliminate Denver Northside Bypass
.2? .2+		29	2/73	(6) S. Platte River Interceptor #2
.5+ .5+		30	6/73	(7) Metro Denver Plant Expansion
		31	6/74	(8) S. Adams
.1+		32	3/74	(9) Brighton
		33	7/75	(10) Ft. Lupton
.6+		34	1/74	(11) Boulder
.5+		35	1/74	(12) Longmont
.2		36	1/73	(13) Upper Thompson Sanitation District
		37	7/74	(14) Cheyenne
.3+		38	7/73	(15) Ft. Morgan
.3+		39	7/73	(16) Brush
.3+		40	7/73	(17) Sterling

0.0 0.0

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a.	b.	a.	b.	30		

Planned Accomplishments

PLANNED ACCOMPLISHMENTS SCHEDULE

1. Type of Plan
a. ☒ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title Const. Gr. Op.

3. Sub-Element No. 2B8162

4. Sheet No. 4 of 5

5. Geographical Area Title S. Platte Basin

6. Geo. Area Code

7. Priority

13	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
				Date grant ~~to be~~ awarded	
-	.45		41	1/74	(18) Ft. Collins
–			42	7/74	(19) Windsor
	-		43	7/74	(20) Greeley
2.0	8.0		44	6/73	Monitor existing Construction Grants under way
.2			45	6/73	(1) South Lakewood
[illegible]	.1		46	1/73	(2) Denver Metro Interceptor to Denver Northside (lift pumps)
.1	.1		47	12/73	(3) Brighton
.1	–		48	1/73	(4) Greeley
5	8		49	6/76	Evaluate, provide & monitor approximately 100 grants for minor MWWTP &
					interceptor projects in basin
.1	.05		50	9/73	Influence State to modify or change C.G. priority system to reflect
					S. Platte basin needs
					Influence Citys to have meat packing industry pre-treat wastes discharged to city sewer.
[illegible]	160				

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a.	b.	a.	b.	51<		

Planned Accomplishments

PLANNED ACCO[illegible]MENTS SCHEDULE

1. Type of Plan
a. ☒ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title Const. Gr. Op

3. Sub-Element No. 2B8162

4. Sheet No. 5 of 5

5. Geographical Area Title S. Platte River Basin

6. Geo. Area Code

7. Priority

'73	'74	Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
.05	.05	▨	51	1/74	(1) Ft. Morgan
.05	.06	▨	52	1/74	(2) Brush
.05	.06	▨	53	1/74	(3) Sterling
.1	.1	▨	54	6/76	Support Denver Water Board & Metro Denver Reuse Projects.
		▨	55	1/73	Meet with Denver Metro officials and get commitment to operate plant to minimize
		▨			effluent quality.
		▨			
		▨			
		▨			
		▨			
		▨			
		▨			
		▨			
		▨			
		▨			
		▨			
		▨			

		12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
.25	.25	a. 1.23	b.	a. 2.27	b.	52		
14.80	27.2							

Planned Accomplishments

PLANNED ACCOMPL. [illegible]MENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title O & M		3. Sub-Element No. 2B8163	4. Sheet No. 1/2
	5. Geographical Area Title S. Platte River Basin		6. Geo. Area Code	7. Priority

	14	8. Code	9. No.	10. Sched. Date of Comp.	11. PLANNED ACCOMPLISHMENTS
6	6.9		1	6/76	Perform O & M at major MWWTP in basin
.38			2	6/73	(1) Englewood (new facility)
[illegible]			3	6/73	(2) Brighton (" ")
.32			4	12/72	(3) Brush
.28			5	12/72	(4) Sterling
.3			6	12/72	(5) Ft. Collins Plants #1 & #2
.33			7	6/73	(6) Windsor
.33			8	12/73	(7) Greeley
			9		Promote improved State O & M program at MWWTP having operational programs
					at following locations:
[illegible]			10	6/73	(1) Ft. Morgan
[illegible]			11	6/73	(2) Brush
[illegible]			12	6/73	(3) Sterling
1.5			13	1/73	Meet with Denver Metro officials concerning means of improving O & M of
					present plant
7.06	6.6				

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a.	b.	a.	b.	53<		

Planned Accomplishments

* Included in Basin Summary Manpower Requirements

PLANNED ACCOMP[illegible]IMENTS SCHEDULE

1. Type of Plan
a. ☒ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title O & M

3. Sub-Element No. 268163

4. Sheet No. 2/2

5. Geographical Area Title 6. Platte River Basin

6. Geo. Area Code

7. Priority

13 | 74

15.0 | 16.0

8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
▨	14	6/76	Provide in plant technical assistance to MWWTP in basin where MWWB
▨			O & M Teams have determined need for in depth study.
▨			
▨			
▨			
▨			
▨			
▨			
▨			
▨			
▨			
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▨			
▨			
▨			
▨			

15.0 | 15.0

22.0 | 22.5

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a. 1.88	b.	a. 1.88	b.	54<		

Planned Accomplishments

PLANNED ACCOMPL. .MENTS SCHEDULE

1. Type of Plan
a.☒ Sub-Element
b.☐ Part. Sub-Elem.
c.☐ Geo. Area

2. Program Sub-Element Title Regional Support

3. Sub-Element No. 5T 512214

4. Sheet No. 1 of 2

5. Geographical Area Title S. Platte River Basin

6. Geo. Area Code

7. Priority

B	74	8. Code	9. No.	10 Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
1.0	1.0	▨	1	6/76	Make press releases on basin problems and clean-up progress
.1	.1	▨	2	6/76	Denver Water Board & Denver Metro Reuse Project publicity & information
.02	.02	▨	3	6/76	Make press releases on Clear Creek proposed recreation plan
.05		▨	4	1/73	Make press releases on S. Platte reclassification from York St. to
		▨			State Line.
		▨			
		▨			
		▨			
		▨			
.03		▨	5	11/72	Publicize meeting for Phase I completion.
.13		▨	6	7/73	Publicize results of 3(c) study by DRCOG.
.13	.05	▨	7	9/73	Publicize S. Platte Basin Model Availability.
		▨			
		▨			
		▨			

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a.	b.	a.	b.	55		

1.17 1.12

Planned Accomplishments

PLANNED ACCOMPLISHMENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title Research & Development 5. Geographical Area Title S. Platte River Basin	3. Sub-Element No. 5T1214 6. Geo. Area Code	4. Sheet No. 2/2 7. Priority

73	74	8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
1.0	1.0	▨	1	6/76	Support & assist Metro Denver & Denver Water Board in their reuse project
		▨			for demonstration projects
		▨			
		▨			
		▨			
		▨			
		▨			
		▨			
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		▨			
		▨			
		▨			
		▨			
		▨			
		▨			

1.0 1.0	12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
[illegible]	a. 0.18	b.	a. 0.18	b.	56<		

Planned Accomplishments.

PLANNED ACCO[illegible]MENTS SCHEDULE

1. Type of Plan
a. ☒ Sub-Element
b. ☐ Part. Sub-Elem.
c. ☐ Geo. Area

2. Program Sub-Element Title Water Supply.

3. Sub-Element No. 2C5226

4. Sheet No. 1/1

5. Geographical Area Title S. Platte River Basin

6. Geo. Area Code

7. Priority

73 74

8. Code	9. No.	10. Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
	E	6/76	Support Denver Water Board & Denver Metro Reuse Program.

.10 .10

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a. 0.0083	b.	a. 0.0083	b.	57<		

Planned Accomplishments

PLANNED ACCOMPLISHMENTS SCHEDULE

1. Type of Plan a. ☒ Sub-Element b. ☐ Part. Sub-Elem. c. ☐ Geo. Area	2. Program Sub-Element Title Const. Grants Adm. 5. Geographical Area Title S. Platte River Basin
3. Sub-Element No. 2B8316 6. Geo. Area Code	4. Sheet No. 1/1 7. Priority

73	74	8. Code	9. No.	10 Sched Date of Comp.	11. PLANNED ACCOMPLISHMENTS
2.0	2.0	▨	1	6/76	Award & administer Construction Grants for 25 major MWWTP in Basin currently under construction now or during the next four years.
2.0	2.0	▨	2	6/76	Award & administer Construction Grants for 100 minor WWTP and interceptor under construction now or during the next four years.

12. FY 1973		13. FY 1974		14. Prepared by & Date	15. Reviewed by & Date	16. Approved for RPIO
a. 0.33	b.	a. 0.33	b.	58<		

4.0 4.0

Planned Accomplishments

FORM VI

PRIORITY BASIN ACCOMPLISHMENTS: SEMI-ANNUAL PREPARATIONS MILESTONES REPORT

DATE SUBMITTED: 9/20/72

REGION VIII 2nd HALF, 1972

BASIN: S. Platte

PREPARED BY: G. Hartmann (Name) S. Platte Basin Coordinator (Title) TEL. 837-4963 (303)

APPROVED BY: ____ (Name) ____ (Title) ____ (Initials)

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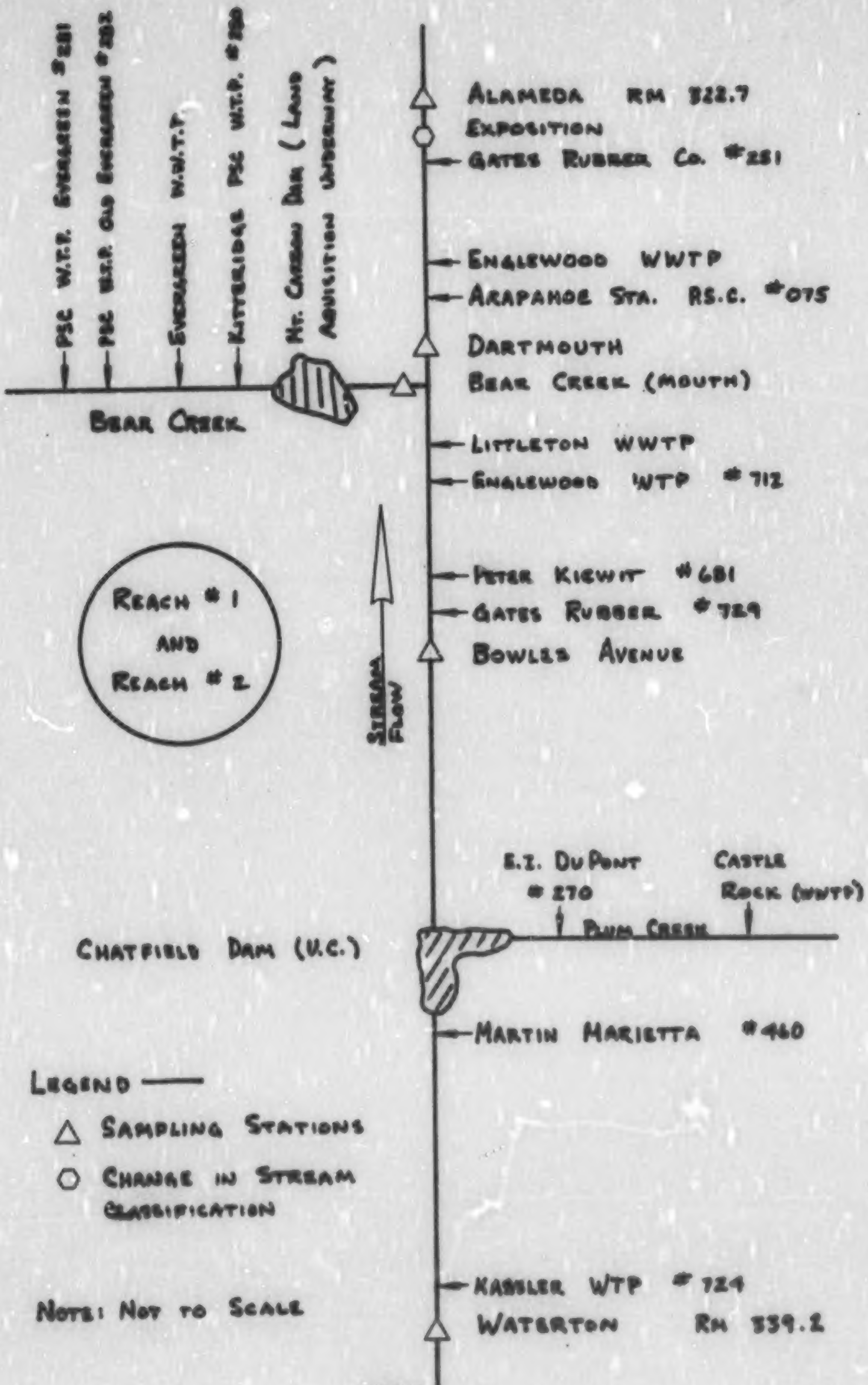
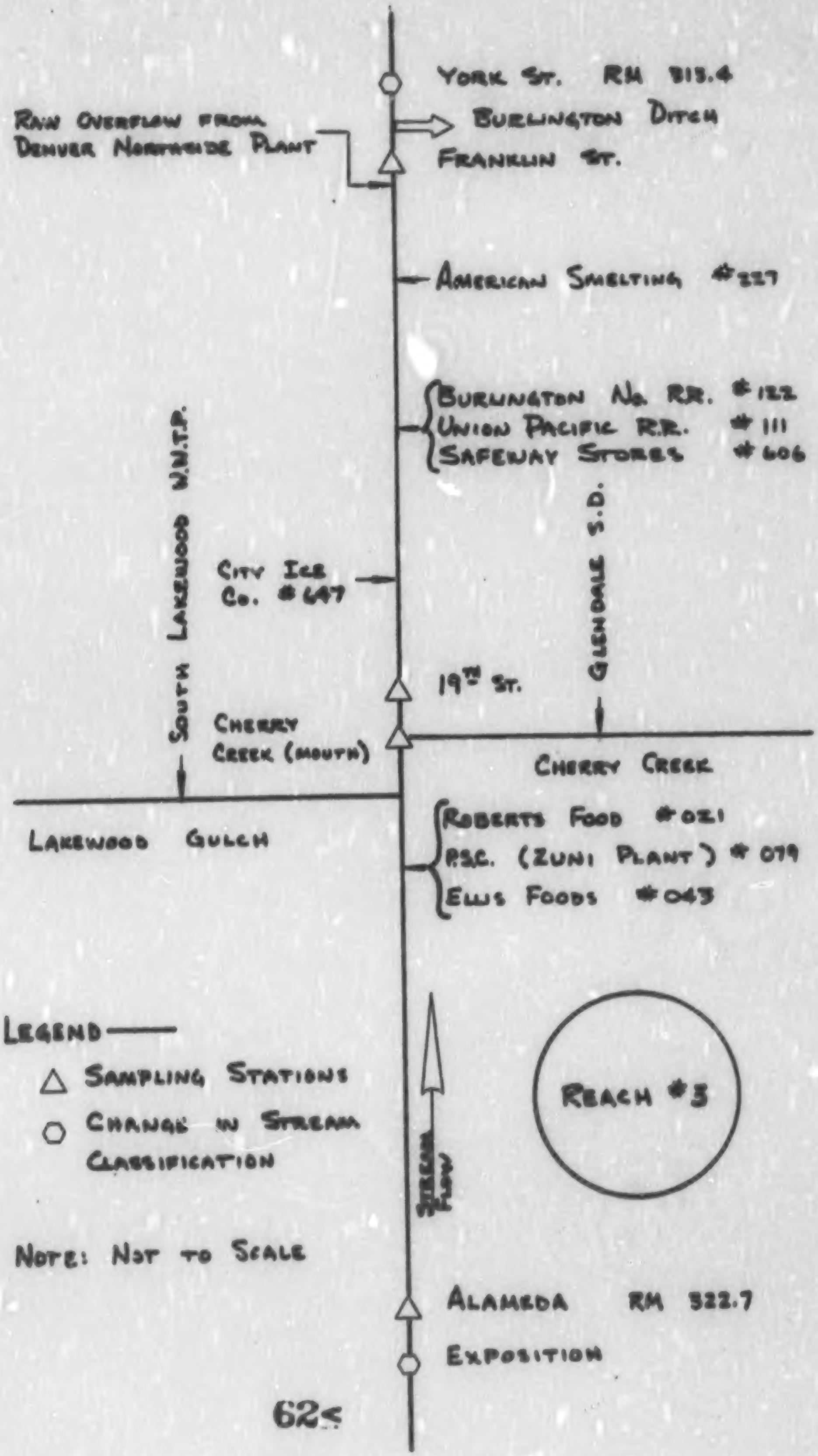
MILESTONES	DATE MILESTONE ATTAINED or TO BE ATTAINED	LIST ANY MISSING OR INADEQUATE PREPARATIONS AND INDICATE FOR EACH PERIOD IN CURRENT STATUS. DISCUSS THOSE NEEDING HEADQUARTERS ATTENTION, INCLUDING REASONS, CORRECTIVE MEASURES, AND IMPLICATIONS FOR FUTURE PROGRESS. USE SUPPLEMENTARY SHEETS AS NECESSARY.
CRITICAL WQ DATA OBTAINED	Yes 6/72	The DRCOG 3(c) Study will provide continuing water quality data for the Metro Area.
CRITICAL EFFLUENT DATA OBTAINED	Yes 6/72	
NECESSARY MODELING COMPLETED	No 1/73 1/73	Denver Metro Area - 3(c) study model will be ready for use S. Platte River Basin model funded by EPA grant will be ready for use.
18CFR/FULLY DEVELOPED PLANS FOR AREA APPROVED AND NO REVISIONS NEEDED	No 8/73 8/73 8/73	Denver Metro area - 3(c) study will produce this. Larimer-Weld Co. - Planning now underway by regional planning. S. Platte River Basin - State to complete then.
STATE PRIORITIES FOR 1 & 5 YEAR NEEDS CONFORMED WITH ACCOMPLISHMENT PLAN	No 8/73	Get State to revise 1-5 year needs list to reflect basin needs.
EFFLUENT GUIDELINES FOR CRITICAL SOURCES AVAILABLE	No 3/73	Need Nat'l Stds. for Sugar Beet Industry. Regional Stds. more stringent and may not hold in region.
WQ CRITERIA COVERING ALL CRITICAL PARAMETERS IN AREA APPROVED AND NO REVISIONS NEEDED	No 6/73	3(c) Study and S. Platte Basin study will point out additional sources.
USE DESIGNATIONS AND NONDEGRADATION STATEMENTS FOR AREA WATERS APPROVED AND NO REVISIONS NEEDED	USE Desig. No 1/73 Non-Degrad. Yes	State is revising use classif. - upgrading. 6/67 - Denver
IMPLEMENTATION SCHEDULES COVERING THE AREA'S DISCHARGERS APPROVED AND CONFORMED WITH ACCOMPLISHMENT PLAN	No 8/73 59≤	After Denver 3(c) and S. Platte Basin Plan and Larimer-Weld plan implementation dates for municipal sources will be set.

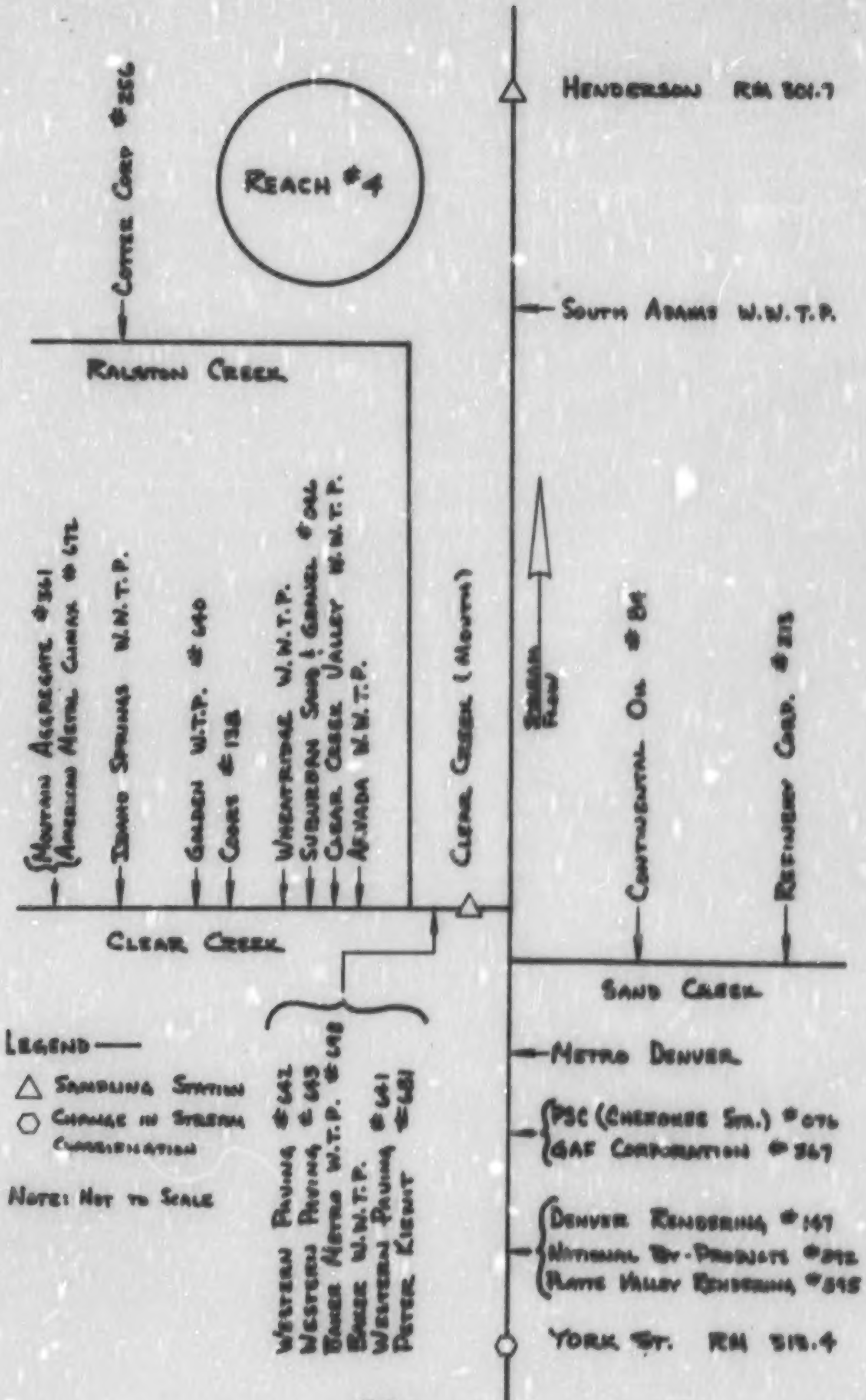
P.____ OF ____

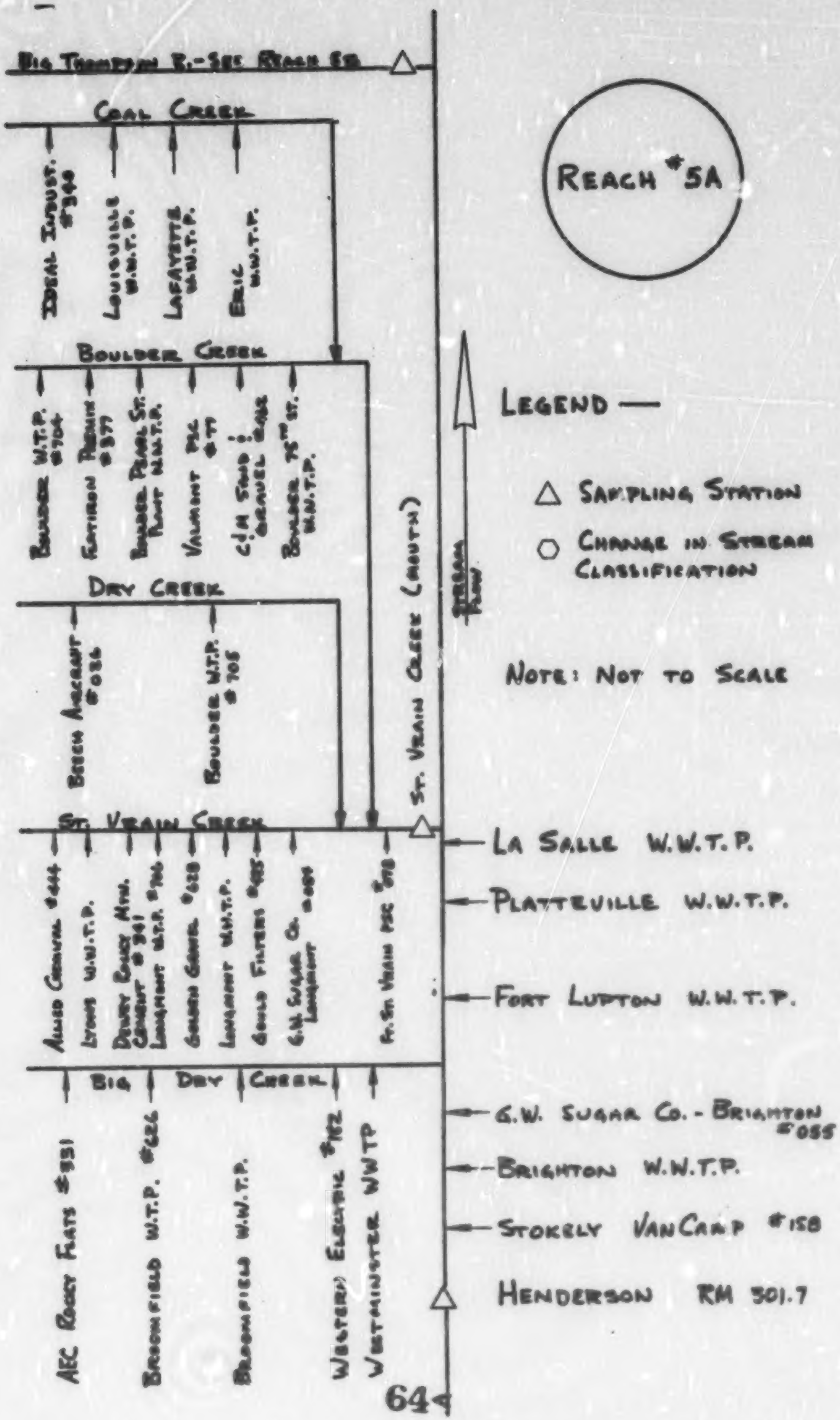
SECTION D

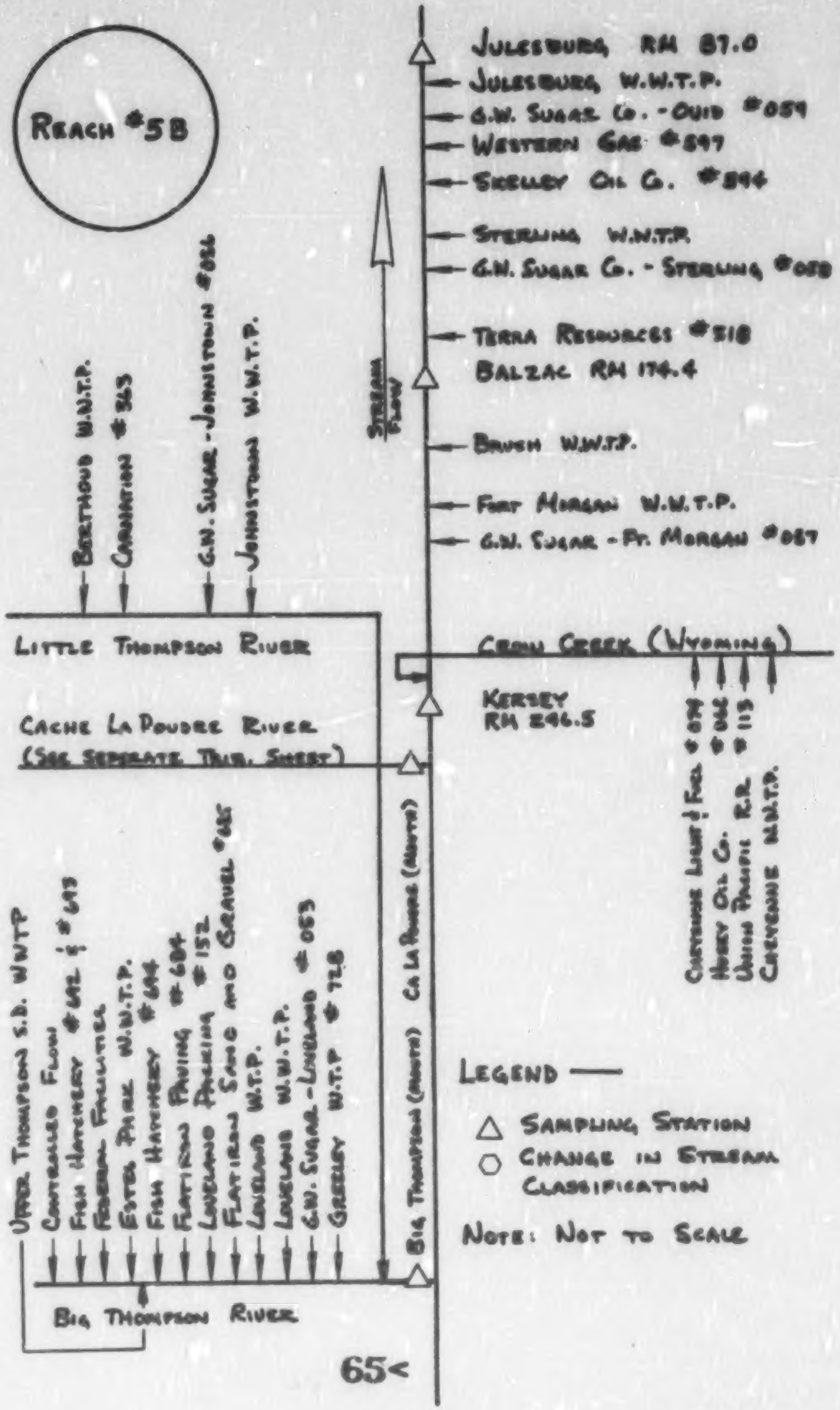
Point Source Loads & Locations

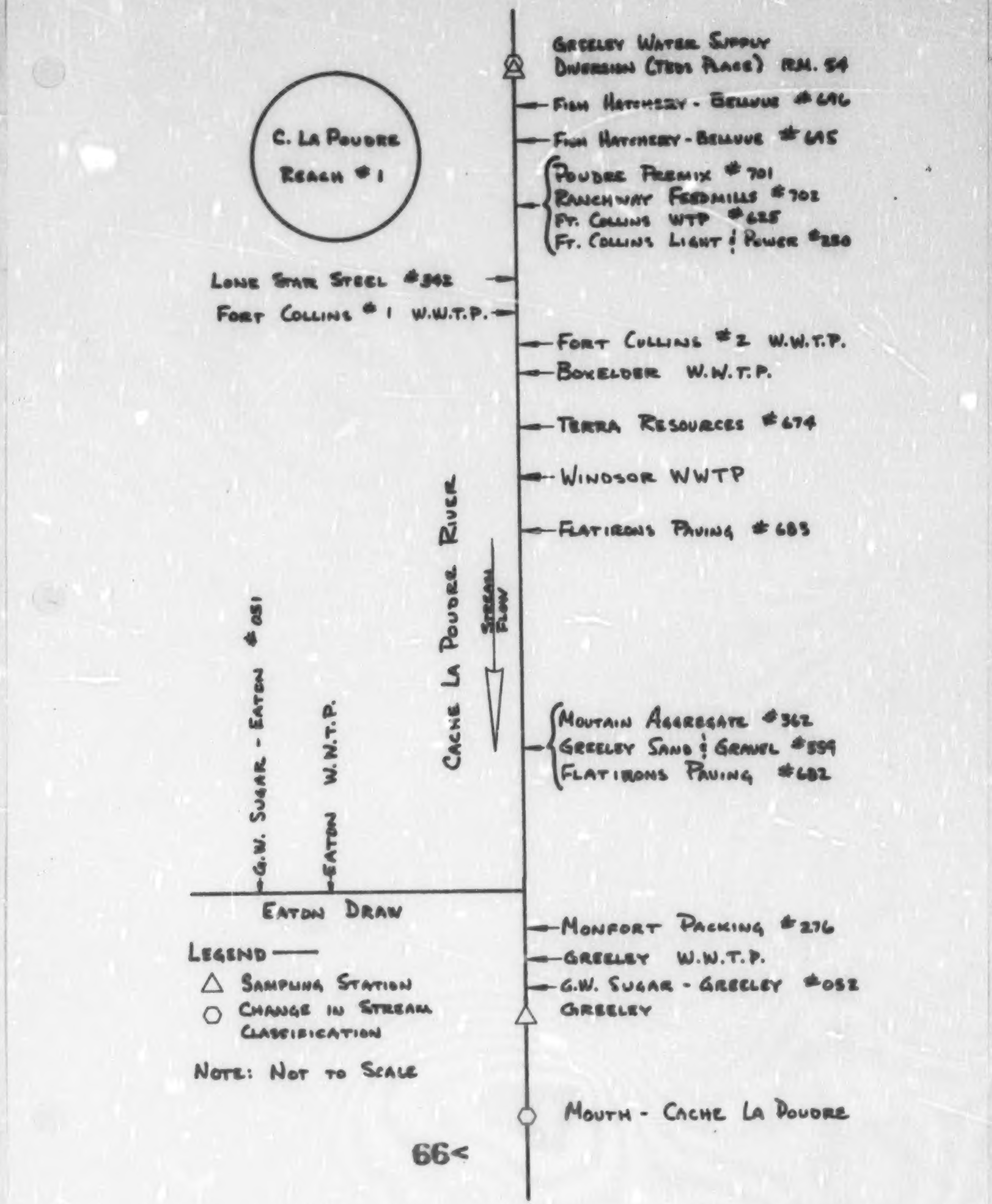

PSC W.T.P. Evergreen #281
PSC W.T.P. Old Evergreen #282
Evergreen W.W.T.T.
Kitteridge PSC W.T.P. #280
Mt. Carbon Dam (Land Acquisition Underway)
Bear Creek
Alameda RM 322.7
Exposition
Gates Rubber Co. #251
Englewood WWTP
Arapahoe Sta. PS.C. #075
Dartmouth
Bear Creek (Mouth)
Littleton WWTP
Englewood WTP #712
Peter Kiewit #681
Gates Rubber #729
Bowles Avenue
Reach #1 and Reach #2
Stream Flow
E.I. DuPont #270
Castle Rock (WWTP)
Plum Creek
Chatfield Dam (U.C.)
Martin Marietta #460
Legend
△ Sampling Stations
○ Change in Stream Classification
Kassler WTP #724
Waterton RM 339.2
Note: Not to Scale

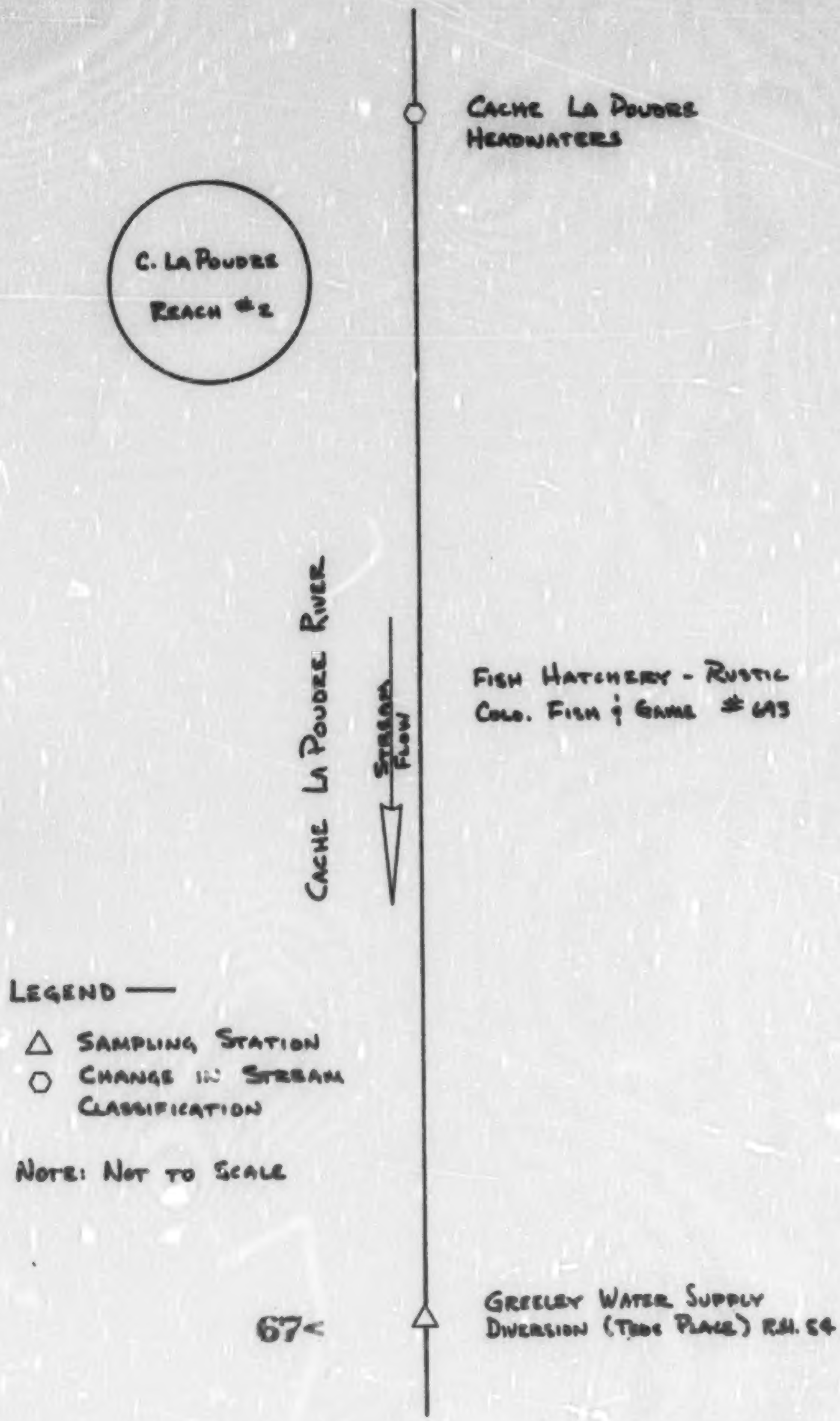

York St. RM 313.4
Raw Overflow from Denver Northside Plant
Burlington Ditch
Franklin St.
American Smelting #227
Burlington No. RR. #122
Union Pacific R.R. #111
Safeway Stores #606
South Lakewood W.W.T.P.
Glendale S.D.
City Ice Co. #647
19th St.
Cherry Creek (mouth)
Cherry Creek
Lakewood Gulch
Roberts Food #021
P.S.C. (Zuni Plant) #079
Ellis Foods #043
Legend
△ Sampling Stations
○ Change in Stream Classification
Stream Flow
Reach #3
Note: Not to Scale
Alameda RM 322.7
Exposition


Reach #4
Cotter Corp #256
Ralston Creek
Henderson RM 301.7
South Adams W.W.T.P.
Mountain Aggregate #361
American Metal Climax #672
Idaho Springs W.W.T.P.
Golden W.T.P. #640
Coors #138
Wheatridge W.W.T.P.
Suburban Sand & Gravel #041
Clear Creek Valley W.W.T.P.
Arvada W.W.T.P.
Clear Creek (Mouth)
Stream Flow
Continental Oil #84
Refinery Corp. #215
Clear Creek
Sand Creek
Western Paving #642
Western Paving #643
Baker Metro W.T.P. #648
Baker W.W.T.P.
Western Paving #641
Peter Kiewit #681
Metro Denver
PSC (Cherokee Sta.) #076
GAF Corporation #367
Denver Rendering #147
National By-Products #372
Platte Valley Rendering #395
York St. RM 313.4
Legend —
△ Sampling Station
○ Change in Stream Classification
Note: Not to Scale


Big Thompson R. - See Reach 5B
Coal Creek
Ideal Indust. #340
Louisville W.W.T.P.
Lafayette W.W.T.P.
Eric W.W.T.P.
Boulder Creek
Boulder W.T.P. #704
Flatiron Premix #377
Boulder Pearl St. Plant W.W.T.P.
Valmont P.S.C. #77
C&M Sand & Gravel #112
Boulder 75th St. W.W.T.P.
Dry Creek
Beech Aircraft #036
Boulder W.T.P. #705
St. Vrain Creek
Allied Chemical #444
Lyons W.W.T.P.
Dewey Rocky Mtn. Cement #341
Longmont W.T.P. #706
Golden Gravel #628
Longmont W.W.T.P.
Gould Filters #495
G.W. Sugar Co. Longmont #054
Ft. St. Vrain PSC #978
Big Dry Creek
AEC Rocky Flats #351
Broomfield W.T.P. #626
Broomfield W.W.T.P.
Western Electric #162
Westminster WWTP
St. Vrain Creek (mouth)
Stream Flow
La Salle W.W.T.P.
Platteville W.W.T.P.
Fort Lupton W.W.T.P.
G.W. Sugar Co. - Brighton #055
Brighton W.W.T.P.
Stokely VanCamp #158
Henderson RM 301.7
Reach #5A
Legend —
△ Sampling Station
⬡ Change in Stream Classification
Note: Not to Scale


REACH #5B
JULESBURG RM 87.0
JULESBURG W.W.T.P.
G.W. SUGAR CO. - OVID #059
WESTERN GAS #597
SKELLEY OIL CO. #594
STERLING W.W.T.P.
G.W. SUGAR CO. - STERLING #058
TERRA RESOURCES #518
BALZAC RM 174.4
STREAM FLOW
BRUSH W.W.T.P.
FORT MORGAN W.W.T.P.
G.W. SUGAR - FT. MORGAN #057
BERTHOUD W.W.T.P.
CARNATION #363
G.W. SUGAR - JOHNSTOWN #056
JOHNSTOWN W.W.T.P.
LITTLE THOMPSON RIVER
CROW CREEK (WYOMING)
KERSEY RM 246.5
CHEYENNE LIGHT & FUEL #078
HUSKY OIL CO. #046
UNION PACIFIC R.R. #113
CHEYENNE W.W.T.P.
CACHE LA POUDRE RIVER
(SEE SEPERATE TRIB. SHEET)
BIG THOMPSON (MOUTH)
CA LA POUDRE (MOUTH)
UPPER THOMPSON S.D. WWTP
CONTROLLED FLOW
FISH HATCHERY #692 & #693
FEDERAL FACILITIES
ESTES PARK W.W.T.P.
FISH HATCHERY #694
FLATIRON PAVING #604
LOVELAND PACKING #152
FLATIRON SAND AND GRAVEL #065
LOVELAND W.T.P.
LOVELAND W.W.T.P.
G.W. SUGAR - LOVELAND #053
GREELEY W.T.P #728
BIG THOMPSON RIVER
LEGEND
△ SAMPLING STATION
⬡ CHANGE IN STREAM CLASSIFICATION
NOTE: NOT TO SCALE

GREELEY WATER SUPPLY DIVERSION (TEDS PLACE) R.M. 54
FISH HATCHERY - BELLVUE #696
FISH HATCHERY - BELLVUE #695
POUDRE PREMIX #701
RANCHWAY FEEDMILLS #702
FT. COLLINS WTP #625
FT. COLLINS LIGHT & POWER #250
C. LA POUDRE
REACH #1
LONE STAR STEEL #342
FORT COLLINS #1 W.W.T.P.
FORT CULLINS #2 W.W.T.P.
BOXELDER W.W.T.P.
TERRA RESOURCES #674
WINDSOR WWTP
FLATIRONS PAVING #683
CACHE LA POUDRE RIVER
STREAM FLOW
G.W. SUGAR - EATON #051
EATON W.W.T.P.
MOUTAIN AGGREGATE #362
GREELEY SAND & GRAVEL #359
FLATIRONS PAVING #682
EATON DRAW
MONFORT PACKING #276
GREELEY W.W.T.P.
G.W. SUGAR - GREELEY #052
GREELEY
MOUTH - CACHE LA POUDRE
LEGEND
△ SAMPLING STATION
○ CHANGE IN STREAM CLASSIFICATION
NOTE: NOT TO SCALE


CACHE LA POUDRE
HEADWATERS
C. LA POUDRE
REACH #2
CACHE LA POUDRE RIVER
STREAM
FLOW
FISH HATCHERY - RUSTIC
COLO. FISH & GAME #693
GREELEY WATER SUPPLY
DIVERSION (TEDE PLACE) R.M. 54
LEGEND —
△ SAMPLING STATION
○ CHANGE IN STREAM
CLASSIFICATION
NOTE: NOT TO SCALE

PRIORITY RANKING OF DISCHARGES IN SOUTH PLATTE BASIN

Top Ten Grouping: Not in order of priority within group

(1) Denver Metro #1

South Lakewood WWTP
Wheatridge WWTP
Clear Creek S.D. WWTP
Arvada S.D.
Baker W & S.D.

Greeley WWTP
Great Western (Greeley) #052
Great Western (Ovid) #059

(2) Coors #138 (includes Golden's waste)
Great Western (Longmont) #054
Sterling WWTP RM 199.1

(3) Gates Rubber Co. #251 RM 320
Continental Oil #084 Sand Ck.

(4) Husky Oil Co. #068 - Crow Ck.
Fort Morgan WWTP RM 195.2
Great Western (Sterling) #058

(5) Allied Chemical #444 - St. Vrain

(6) Brighton WWTP RM 295.8

(7) Littleton WWTP
Englewood WWTP
American Smelting #227 RM 315
American Metal Climax #672 Clear Creek
Cotter Corp #256 - Ralston Ck.
Great Western (Ft. Morgan) #057

(8) Beech Aircraft #026 - Dry Creek
Brush WWTP RM 185.6
Julesburg WWTP RM 89.6

(9) Martin Marrietta #460
PSC Cherokee Sta. #076 RM 313
Boulder WWTP - 75th St. Plant
Great Western (Loveland) #053
Berthoud WWTP - Little Thompson
Fort Collins WWTP - Cache La Poudr.

Plant #1
Plant #2
Boxelder

Great Western - Eaton #051
Eaton WWTP

(10) Gates Rubber Co. #729 RM 330
Union Pacific R.R. #111 RM 316
GAF Corp. #367 RM 313
Refinery Corp. #213 RM 312.1
Western Paving #642 Ralston Ck.
Western Paving #643 Ralston Ck.
Western Paving #641 Ralston Ck.
AEC (Rocky Flats) #331
Terra Resources #674 - La Poudre

CRITERIA FOR PRIORITY ASSESSMENT

PRIORITY VALUE	% of Total Basin Discharge	BOD	TDS	TSS
0.5	No information available from any source.			
1	1%	≤ 1670	$\leq 15{,}900$	$\leq 2{,}500$
3	5%	≤ 8300	$\leq 80{,}000$	$\leq 12{,}400$
5	$>5\%$	>8300	$>80{,}000$	$>12{,}400$

PRIORITY VALUE	FECAL COLIF.	GREASE & OIL Pounds	TOXIC METALS
0	$<$ 5000/100 ml		
0.5			If suspected & no data available.
1	$>$ 5000/100 ml	< 1	
3	$<$ 10,000/100 ml	< 68	
5	$>$ 10,000/100 ml	> 68	If found & is health hazard

MINOR POINT SOURCE DISCHARGES IN THE S. PLATTE BASIN WITHIN DRCOG AREA

	Population Served
1. Adams County Fairgrounds	1000
2. Arapahoe Airport	75
3. Berthoud Lodge	240
4. Crestview School	350
5. East Cherry Creek	35
6. Gunbarrel	280
7. Highline Park	500
8. Hi-Land Acres	160
9. Jeffco School Outdoor Lab	200
10. Lake of the Pines	300
11. Lake Eldora	500
12. Morrison	450
13. Nederland	600
14. Plastic Tooling Aids	30
15. Red Lion Inn	
16. Stanley Lake[3]	200
17. Storage Technology	100
18. Sugar Hills	
19. San Lazaro Mobile Homes	1350
20. San Souci Mobile Home Park	180
21. Sky Ranch Mobile Homes	400
22. Valley Country Club	
23. Voyager Inn	150
24. West Jefferson County	225
25. YMCA Camp, Estes Park	1300

MINOR POINT SOURCE DISCHARGES
IN THE S. PLATTE BASIN OUTSIDE DRCOG AREA

	Population Served
1. Ault	900
2. Bailey	300
3. Berthoud Falls Cafe	30 max.
4. Berthoud Lodge	----
5. Black Hawk-Central City	----
6. Cabin Creek, Powder Station Lodge	25
7. Continental Divide Race Track	Varies greatly
8. Continental West Subdivision (Horsetooth Res.)	104
9. Crook	230
10. Del Camino	1200
11. Denver, S.E.	----
12. Eden Valley	70
13. Elbert	150
14. Elizabeth	450
15. Empire	500
16. Estes Park (BOR)	200 approx.
17. Evans	3000
18. Fairplay	100
19. Fawn Valley	----
20. Fleming	360

		Population Served
21.	Forney Industries	400
22.	Geneva Basin Ski Area	200-700
23.	Georgetown	500
24.	Gerald & Cato Camp	500
25.	Gilcrest	365
26.	Hill-N-Park	1200
27.	Hudson	550
28.	Husky Truck Stop	150
29.	Johnson's Corner Motel & Restaurant	100
30.	Keensburg	440
31.	Kersey	470
32.	Lamey Trailer Ct.	100
33.	Lazy M (Ranch?)	200
34.	Log Lane Village	310
35.	Loveland Basin Ski Area	4000/week
36.	Loveland Valley Ski Area	500
37.	Louviers	300
38.	Mary's Lake Campground	440
39.	Mead	200
40.	Merino	270
41.	Mill Site Lounge, Silver Plume	40
42.	Milliken	1000
43.	Moffat & Son, Inc	----
44.	National Park Village	----

		Population Served
45.	Ovid	550
46.	Parker Heights Subdivision	43
47.	Peetz	250
48.	Perry Park	----
49.	Pierce	438
50.	Platteville	700
51.	Red Feather Lakes Golf	50
52.	Reverend's Ridge	125
53.	Rocky Mountain Nat'l Park, Big Horn--Fall River Entrance	*
54.	Rocky Mtn. Nat'l Park, Fall River Pass	**
55.	Rocky Mtn. Nat'l Park, Glacier Basin	220
56.	Rocky Mtn. Nat'l Park, Aspen Glen Campground	----
57.	Rocky Mtn. Nat'l Park, Hidden Valley Ski Area	1000 approx.
58.	Rocky Mtn. Nat'l Park, Long's Peak area	----
59.	Rocky Mtn. Nat'l Park, Moraine Park	250
60.	Rocky Mtn. Nat'l Park, Utility & Housing area	150-400
61.	St. Marys	------
62.	Santa Maria	90 max.
63.	Silver Heights Waste & Sanitation District	100
64.	Silver Plume	280
65.	Simla	425 approx.
66.	So. Ft. Collins San. Dist.	500 +
67.	Stub Creek Station	----
68.	Thunder Mtn. Lodge	95
69.	Weld County Tri-Area	----

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*Not in use in 1963 last data available.
**Lagoon in future (data from 1963).

	Population Served
70. Wellington.	600
71. Wiggins	600
72. YMCA Conference Camp.	50-3000

MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC	TOT BAC	OIL & GREASE	TOX MET	OTHER	
S PLATTE R - WATERTON TO BOWLES AVE														
DENVER WTR BD- WTP RM 339 #724	.17	7.8	33 72	/ 39	/ 366	5 2694				ND	ND	ND		5/-
MARTIN MARIETTA #460	.55	7.0	92	87	/ 1239	/ 138	NA					1.6 AG 5 1.23CR		7/9
CASTLE ROCK- PL CR RM 332/15	.2			/ 650								NA		1/-
EI DUPONT #270	.9	7.5	92 57	/ 315	/ 4400	/ 51	600					*		3/-

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MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE		FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC	TOT BAC	OIL & GREASE	TOX MET	OTHER	
S PLATTE R - BOWLES AVE TO EXPOSITION AV															
PETER KIEWIT RM 330	#68[illegible]	.03	7.9	55	/ <1	/ 70	/ 15					/ 1	ND		4/-
GATES RUBBER RM 330	#72	.03	7.6	70	/ 100	/ 930	/ 140	3	6		NI	3 60			6/10
ENGLEWOODWTP RM 328	#712	.28	7.6	55	/ 18	/ 803	/ 411				.5 ND	0	.16 CU .46 ZN		3.5/-
LITTLETON RM 327.6		5.2			/ 1400	3 26500	/ 1700				<96				5/7
P S CO WTP- EVGN RM 326/30	#281	.03	7.7	60	/ 1	/ 10	/ 30								3/-
P S CO WTP-OLD EV RM 326/30	#282	.03	7.0	60	/ 2	/ 10	/ 40								3/-
EVERGREEN WWTP RM 326/25		.2			/ 200	.5	/ 200			.5					3/-
P S CO. WTP-KTRG RM 336/20	#280	.003	7.7	50	/ <1	/ /	/ 10			.5					3.5/-
P S CO-ARAPAHOE RM 328	#075	1.3	6.9	69	/ 51	/ 13164	/ 304						.5		3.5/-
W ENGLEWOOD RM 325.1		8.6			3 6200	3 53211	3 9700				<240				9/7
GATES RUBBER CO RM 320	#251	[illegible]	8.0	HOT?	/ 140	/ 4581	/ 327					5 125	.79CR .3 .896PB		13/3

MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE		FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC	TOT BAC	OIL & GREASE	TOX MET	OTHER	
S PLATTE R - EXPOSITION AVE TO YORK ST															
SO LAKEWOOD RM 318.9		1.8			/ 500	/ 7900	/ 900				.5				3.5/1
ROBERTS FOOD RM 319	#021	.072	6.1	59 67	0	/ 685	0								1/-
P S CO- ZUNI RM 318	#079	44.	7.9	MJ 79 SM 95	/ 150	3 19600	/ 400								5/-
ELLIS FOOD RM 319	#043	.06	7.6	53	0	/ 75	0								1/-
GLENDALE SD- CH CR RM 317.7/5		.3			/ 20	0	/ 50				220				2/-
CITY ACE RM 317	#647	.4	7.1	72	/ 7	/ 2837	/ 3								3/-
BURLINGTON NO RM 316	#122	NO REG DISCHARGE- NO DATA													
UNION PACIFIC RR RM 316	#111	.077	11.0	90 105	/ 276	/ 344	/ 163					3 <75	.004		6/10
SAFEWAY STORES RM 316	#606	.07	8.1	65	/ 4	/ 290	/ 4								3/-
AMERICAN SMELTING RM 315	#227	1.008	9.5	43	/ 105	/ 3789	/ 181					/ 4	15CU 5 8PB ZN		9/7

MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC TOT BAC BAC	OIL & GREASE	TOX MET	OTHER
S PLATTE R - YORKE ST TO HENDERSON												
DENVER RENDERING RM 313	.88	6.8	70	1 56	1 1580	1 504			.5	.5		4/-
NATIONAL BY-PROD RM 313 #292	.18	7.3	75	1 <1	1 527	1 14				1 6.5		4/-
PLATTE VALLEY REN RM 313 #595	.19	7.0	70 75	1 <1	1 49	1 <1	2		.5 >240	1 .15		4.5/-
P S CO CHEROKEE RM 313 #076	6.5	7.1	71 83	1 652	3 40599	3 3908						7/9
GAF CORP RM 312 #367	.027	6.0	90 95	1 <1	1 45	1 29				3 6.5		6/10
METRO DENVER RM 312.2	116.			5 30000	5 602700	5 118000			3 <4700			18/1
CONTINENTAL OIL RM 312.1 #084	.65	8.0	98 84	1 135	1 6850	1 130	216	5		5 81	3CR 5 190	13/3
REFINERY CORP RM 312.1 #213	.144	7.5	83 78	1 60	1 1950	1 22	54	3 6		18.6		6/10
MTN AGGR- CLR CR RM 311.1/49 #361	.2					.5						.5/-
AMERICAN MTL CLMX RM 311.1/49 #672	8.93	7.4	73 40		3 26300	1 515			6 49		MO,MN 5 ZN	9/7
IDAHO SPGS RM 311.1/38.7	.3			1 160	.5	1 80			.5 240000			3/-
GOLDEN WTP RM 311.1/19 #640	.59	7.6	45	.5 ND	.5 ND	.5 ND					CU .5 MGL	1.5/-

MAJOR POLLUTI[illegible] SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC	TOT BAC	OIL & GREASE	TOX MET	OTHER	
S PLATTE R - YORKE ST TO HENDERSON														
COORS RM 311.1/18 #138	23.	7.0	65	3 8200	3 35500	3 3700	575			<2 1300	5 669			14 / 2
WHEATRIDGE SD RM 311.1/7.7	2.1			3 2400	/ 10550	/ 1500				700 54000				5/ /
SUB SAND & GR RM 311.1/7.5#046	.58	7.7	40	NA	/ 1230	/ 1450								2/ -
CLEAR CR VALLEY SD RM 311.1/7.0	.5			/ 350	/ 17100	/ 800				.5 38c				3.5 / /
ARVADA SD RM 311.1/6.7	1.1	NA	NA	/ 280	/ 5150	/ 450				<39 <1600	NA	NA		3 / /
COTTER CORP #256 RM 311.1/65/12	.072	7.9	NA	/ <1	/ 625	/ 107	<1	.2		NA	/ .6	NA	5 1.9 AL RA226	9/ 7
WESTERN PVG #642 RM 311.1/4.0	.085	7.8	55	/ 1	/ 588	/ 3				NA	3 5.7	NA		6/10
WESTERN PVG #6 3 RM 311.1/3.8	.085	7.9	55	/ 4	/ 291	/ 4				NA	3 6.4	NA		6/10
BAKER METRO WTP RM 311.1/4 #698	.084	7.0	58	NA	/ 315	NA				NA	0	NA		1/ -
BAKER W&SD RM 311.1/3.4	1.0	NA	NA	/ 580	/ 9670	/ 330				<7 <66	NA	NA		3 / /
WESTERN PVG #641 RM 311.1/2.5	.10	8.0	55	/ 1	/ 480	/ 5				NA	3 2.1			6/10
PETER KIEWIT #681 RM 311.1/2.6	.03									<				
SO ADAMS WSD RM 306.7	1.8			/ 930	/ 15200	/ 2200				48 650				3/ -

MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC TOT BAC	OIL & GREASE	TOX MET	OTHER	
S PLATTE R - HENDERSON TO STATE LINE													
STOKELY VN CP #158 RM 296	.063	7.1	90 65	/ <1	/ 551	/ 1				/ <.05			4/-
BRIGHTON WWTP RM 295.8	1.3			/ 580	3 15900	/ 900			.86E6 5 >2.7E6				10/6
GW SUGAR-BRTN #055 RM 295.6	2.5	8.3	79 64	/ 230	3 20000	/ 170	105 67	3.1	130 2000				5/-
USAEC #331 RM 290/30	.31	7.8	55 75	/ 17								5 POT, RAD	6/10
BROOMFIELD WTP#626 RM 290/25	.08	7.4	55										0/-
BROOMFIELD WWTP RM 290/20	.4			/ 110		/ 10			0.5 ? 50000				2.5/-
WESTERN ELECT #162 RM 290/17	.13	8.0	70 75	NA	/ 1050	0							1/-
WESTMINSTER WWTP	0.												1/-
FORT LUPTON WWTP RM 267.6	.5			/ 310		/ 300			8900 3 40000				5/-
PLATTEVILLE WWTP RM 276	.1			/ 40		/ 90			.5 30000				2.5/-
LA SALLE WWTP RM 273	.1			/ 30		/ 30			.5 2100				2.5/-
ALLIED CHEM 444 RM 270/49	.01			/ 28	/ 2587	/ 426				3 3.8	PB ZN 5 197		11/5

MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC TOT BAC	OIL & GREASE	TOX MET	OTHER
S PLATTE R - HENDERSON TO STATE LINE												
LYONS WWTP RM 270/39	.1			/ 30		/ 20			6100 / 66000			3/-
DEWEY RKY MTN #341 RM 270/37	.002	7.3	73	/ <1	/ 20	/ <1				/ .045		4/-
LONGMONT WTP #706 RM 270/35	1.63	6.9	60									0/-
GOLDEN GRAVEL #628 RM 270/25	.004	7.5	63	NA	/ 27	/ <1						2/-
LONGMONT WWTP RM 270/23	~~8~~3.1			/ 1650	32000	/ 2000			34 .5 220034			2.5/-
GOULD FILTER #435 RM 270/22	.038	7.0	73 60									0/-
GW SUGAR LNGMT#054 RM 270/21	7.0	8.3	118 99	3 2700	3 73200	3 2800	385 100	.6	40E3 5 180E3			14/2
BEECH AIRCRFT #026 RM 270/18/15	.003	7.0	70 40	/ 3	/ 26	/ <1					5 5.2	8/8
BOULDER WTP #705 RM 270/18/10	3.15	7.0	65	.5 ND	.5 ND	.5 ND						1.5/-
BOULDER WTP #704 RM 270/18/10	1.53	6.5	50	.5 ND	.5 ND	.5 ND						1.5/-
FLATIRON PRMX #377 RM 270/17.6/22	3.2	7.5	75	/ 106	/ 4565	/ 34			NA			3/-
BOULDER-PRL ST PL RM 270/17.6/21.3	4			/ 1520	/ 10600	/ 1200			16 290			3/-
P S CO- VLMNT #077 RM 270/	9.9	8.3	79	/ 248	/ 14328	/ 1242			NA			3/-

MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC / TOT BAC	OIL & GREASE	TOX MET	OTHER
S PLATTE R - HENDERSON TO STATE LINE												
C+M SAND & GR #462 RM 270/17.6/20	.8	6.5-8.	58 70	/ /	/ 2650	/ 40			NA			3/-
BOULDER-75 ST PL RM 270/17.6/17.8	7.8			3 2660	3 26600	/ 1400			<40 <1600			7/9
IDEAL IND #340 RM 270/17.6/7.9/19	.064	7.5	54	/ 6	/ 121	/ /			NA	NA	NA	3/-
LOUISVILLE SD RM 270/17.6/7.9/9	.2			/ 150		/ 240			2700 240000	NA	NA	2/-
LAFAYETTE SD RM 270/17.6/7.9/5	.1			/ 60		/ 70			<20 35000	NA	NA	2/-
ERIE SD RM 270/17.6/7.9/1	.1			/ 120		/ 160			~~NA~~.5 24000	NA	NA	2.5/-
PS CO-ST VR RM 270/1 #078	3.0	7.8	90	/ 252	3 52920	/ 252			NA	NA	NA	5/-
US RKY MTN NTL PK RM 260/60 BG T R	.024	6.4	54	5								
US RKY MTN NTL PK RM 260/70 MN V C	.002	5.6	51	<1								
US RKY MTN NTL PK RM 260/60/6 FL R	.004	6.0	60	<1								
US FITZSIMONS HOSP RM 311.1/5	.23			23								
US RKY MTN ARS RM 318/4	.2	7.7		41								
US BUCKLEY ANG RM 311.1/9	.09			60								

MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC TOT BAC	OIL & GREASE	TOX MET	OTHER	
S PLATTE R - HENDERSON TO STATE LINE													
COLO F&G-ESTES#692 RM 260.4/60.5	1.8	7.5	45 57	/ 30	/ 670	/ 75	30		<3 460	NA	NA		3/-
ESTES PK SD RM 260.4/54.5	.9			/ 210	NA	/ 730	15		NA 220	NA	NA		2/-
UPPER THOMPSON SD RM 260.4/48	0.			1	1	1							
COLO F&G-DRAKE#694 RM 260/42	3.9	7.5	51	/ 30	/ 1060	/ 228	60		<3 29	NA	NA		3/-
FLATIRON PVG #664	3.0	6.5-8.5	70	NA		3 43800			NA	NA	NA		3/-
LOVELAND PKG #152	.05	7.3	55 58	/ 72	/ 270	/ 50			<1	<1	3 18		3/-
FLATIRON SAND & GR #665	2.5	6.5-8.5	75	NA	/ 15000	.5			NA	NA			1.5/-
LOVELAND WTP #675 RM 260/	.15	7.5	48	NA	NA	NA			NA	NA			0/-
LOVELAND WWTP RM 260/24.5	2.7			/ 1350	16000	/ 1100		2.0	1000.5 17000	NA	NA	.3 RES	2.5/-
GW SUGAR-LVLD #053 RM 260/22.5	8.2	8.2		/ 900	3 26900	3 5600			200 1350	NA	NA		7/9
GREELEY WTP #728 RM 260.4/	.12	7.4	55	NA	NA	NA			NA	NA	NA		0/-
BERTHOUD RM 260.4/7.0/12	.2	NA	NA	/ 90	NA	/ 120			~~NA~~ 5 2200000				7/9
CARNATION #363 RM 260.4/7.0/4	.03	5.7	70 75	.5 NA	.5 NA	.5 NA			.5 NA	NA	NA		2/-

MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC TOT BAC	OIL & GREASE	TOX MET	OTHER	
S PLATTE R - HENDERSON TO STATE LINE													
GW SUGAR-JNSTN#056 RM 260.4/7.0/1	4.0	8.0	34 75	3 4200	3 49500	3 3500	254 183	2.3	40000 5 180000		NA	NA	14/2
JOHNSTOWN RM 260.4/7.0/2.0	.2	NA	NA	1 60	NA	1 100			NA				2/-
COLO F&G-RSTL #693 RM 249/74	7.4	7.6	42	1 120	1 4165	1 185	123		<3 >1100	0		NA	3/-
COLO F&G-BLV #696 RM 249/49	1.5	7.5	55	1 7	1 5212	1 88	25		<3 >1100			NA	3/-
COLO F&G-BLV #695 RM 249/47	11.5	7.5	49	1 105	1 13550	1 950	192		<3 23	0		NA	3/-
POUDRE PREMIX #701 RM 249/46	.004	8	50 70	NA	NA	NA			NA		NA	NA	0/-
RANCHWAY FDMLS#702 RM 249/46	.00006	11.2	76	0	1 <1	1 <1			NA		NA	NA	2/-
FT COLLINS WPT#625 RM 249/46	.7	6.5	40	NA	NA	NA			NA	0		NA	0/-
FT COLLINS LAP#250 RM 249/46	.31	6.5	150 59	1 1	1 165	0				0			2/-
LONE STAR STL #342 RM 249/45	.03	6.9	60	1 1	1 47	1 1			0	0	0		3/-
FT COLLINS #1 PL RM 249/44.1	3.9			3 1910	1 12520	3 3580			.5 720000				7.5/9
FT COLLINS #2 PL RM 249/40.2	3.9			1 1270	1 10020	1 980			.5 710000				3.5/9
BOXELDER SD RM 249/39.2	.3			1 110		1 40			.5 3000000				2.5/9

MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC	TOT BAC	OIL & GREASE	TOX MET	OTHER	
S PLATTE R - HENDERSON TO STATE LINE														
TERRA RES #674 RM 249/35	.009	8.7	75	1 10	1 567	1 1					5 6.5			6/10
FLATIRONS PVG #683 RM 249/29	2.8		55		.5 57000	5								5.5/-
WINDSOR WWTP RM 249/23	.15			300										
MTN AGGR #362 RM 249/10	.28				.5	.5								1/-
GREELEY S&GR #359 RM 249/10	3.				.5	.5								1/-
FLATIRONS PVG #682 RM 249/10	2.		55		.5 22000	5								5.5/-
GW SUGAR-EATON#051 RM 249/6.9/7.0	2.6	8.1	51 72	1 300	1 27000	5 3200	113 39			1.2	60 2200			7/9
EATON WWTP RM 249/6.9/6.5	.2			1 120	.5	.5				5 712000				7/9
MONFORT #276 RM 249/6	.0004	7.4	70	1 4	1 4	1 3				ND	ND	ND		3/-
GREELEY WWTP RM 249/5.3	7.0			5 16400	3 31500	5 20600				4.2E3 5 >32E3				18/1
GW SUGAR-GRLY #052 RM 249/4.5	7.5	6.9	43 79	5 20600	3 66000	5 23800	363 580	3.5		160E3 5 50E3				18/1
CHEYENNE L&P #074 RM 243/60	.003	11.9 8.1	142 41	1 <1	1 14	1 1				NA	1 <.003			4/-
HUSKY OIL CO #068 RM 243/80	.35	9.		3 4815	3 28045	1 445	8	0		NA	5 121			12/4

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MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC TOT BAC	OIL & GREASE	TOX MET	OTHER	
S PLATTE R - HENDERSON TO STATE LINE													
UN PAC RR #113 RM 243/80	.30	10.5	79	.5 ND	.5 ND	.5			ND	.5 ND	ND		2/-
CHEYENNE WWTP RM 243/80	7.5	7.3		3 5000	1 2200	1 1900	ND	ND	ND				5/-
GW SUGAR-FT M #057 RM 196.2	10.8	6.7	111 92	5 11600	1 11000	3 6100	395 135	5.4	49 345	NA	NA		9/7
FT MORGAN WWTP RM 195.2	2.6			3 4120	3 60700	1 2200			.51E6 5 3.6E6				12/4
BRUSH WWTP RM 185.6	1.1			1 1290	1 6680	1 410			3.8E6 5 7.8E6				8/8
TERRA RES #316 RM 169	.022	9.4	76	NA	1 630	1 23			NA	0	NA		2/-
GW SUGAR-STLG #056 RM 150.4	6.8	8.1	93 79	3 4400	5 84000	3 4200	136 147		2E3 1 240E3	NA	NA		12/4
STERLING WWTP RM 148.5	2.5			3 6000	3 53000	3 5600			.17E6 5 1.2E6	NA	NA		14/2
SKELLY OIL CO #594 RM 135	.002	8.2	70	0	127	2			NA	AHS			
WESTERN GAS #597 RM 136	.002	7.0	90 70	<1	35	<1			0 500		1.1 CR		
GW SUGAR-OVID #059 RM 94.8	5.	6.8	98 77	18400	52100	5900	151 137	3.4	4.4E6 41E6				
JULESBURG RM 89.6	.2			80	2350	100			160000				

SECTION E

Ambient W.Q. Status

PRIORITY BASIN ACCOMPLISHMENTS: ANNUAL WQ ACCOMPLISHMENTS REPORT

REGION VIII

CALENDAR YEAR IS 72

DATE SUBMITTED 10/2/72

PREPARED BY G. Hartmann (Name)

South Platte Basin Accomplishment Plan (Title)

TEL (303) 837-4963

APPROVED BY ______ (Name) ______ (Title) ______ (Initials)

AREA	POPULATION (Based on 1970 Census)	River Miles or Area Equivalent for Lakes, Estuaries, Etc.			
		Meets Standards (Miles and/or Area)	Not at Standards (Miles and/or Area)	Basin Totals (Miles and/or Area)	
				Basin Miles	Area In ____
Totals All Priority Basins in Region					
Basin S. Platte	1,525,600	680* 455**	139* 364**	819 819	
Basin ____					
Basin ____					

*Based on existing standards.
**Based on proposed reclassification.

Page ___ of ___

TABLE II - AMBIENT WATER QUALITY AT NEAREST DOWNSTREAM MONITORING STATION

SOUTH PLATTE RIVER BASIN
Headwaters Downstream to Bowles Ave.

Reach #1

	BASIC PARAMETERS - MG/L WHERE APPLICABLE													
WASTEWATER SOURCES & R.M.	FLOW cfs	PH S.U.	TEMP °F	DO mg/l	TDS mg/l	TSS mg/l	NH_3-N ORG-N mg/l	TOTAL P (PO_4)	(FECAL) (TOTAL) BACT. per 100 mL	GREASE & OIL mg/l	TOXIC METALS ug/l	BOD_5 mg/l	STDS. BASE FLOW	
CONTROL POINT (headwaters)														
South Platte River at Waterton, Colo. RM 339.2	11	7.2-8.1	58	8.6	218	-	0.25 / --	1.1	490/4600		Zn 550 Fe 650 B 120	2.2	-	
South Platte River above Littleton, Colo. RM 330.4 (Bowles Avenue)	54	6.6-8.6	69	○2.0	293	809	0.8 / --	3.0	740/8000	6	Se 6.0 Zn 760 Fe 2400 Cd 4 Mn 700 B 130	4.0	-	

[illegible] - [illegible] WATER QUALITY AT NEAREST DOWNSTREAM MONITORING STATION

Reach #2

SOUTH PLATTE RIVER BASIN

Bowles Avenue to Exposition Avenue

	BASIC PARAMETERS - MG/L WHERE APPLICABLE												
Wastewater Sources & R.M.	FLOW cfs	PH S.U.	TEMP °F	DO mg/l	TDS mg/l	TSS mg/l	NH_3-N ORG-N mg/l	TOTAL P (PO_4)	(FECAL) (TOTAL) BACT.	GREASE & OIL mg/l	TOXIC METALS ug/l	BOD_5	STDS. BASE FLOW
CONTROL POINT (headwaters)									per 100 ml				
Bear Creek RM 326.4	1.2	7.5-8.5	69	3.8	470	-	0.8	0.8	13,000 130,000	--	Zn 700 Se 5 Fe 1100 B 220	3.2	--
South Platte River at Dartmouth Ave., Denver RM 325.9	-	6.2-8.7	67	2.4	-	933		5.0	17,000 58,000	35	--	13	--
South Platte River at Alameda Ave., Denver RM 322.7	-	6.3-8.5	67	2.6	-	808		5.6	7200 66,000	32	--	18	--

Note 1. Alameda Station just downstream from Exposition Division Point.
2. Minimum Flow in Section Bowles Ave. to Exposition Ave. is estimated to equal 100 cfs.

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TABLE II - AMBIENT WATER QUALITY AT NEAREST DOWNSTREAM MONITORING STATION

Reach #3

SOUTH PLATTE RIVER
Exposition Avenue to York St., (Data at York taken at Franklin St.)

Wastewater Sources & R.M.	BASIC PARAMETERS - MG/L WHERE APPLICABLE												
	FLOW cfs	PH S.U.	TEMP °F	DO mg/l	TDS mg/l	TSS ug/l	NH_3-N ORG-N mg/l	TOTAL P (PO_4)	(FECAL) (TOTAL) BACT.	GREASE & OIL mg/l	TOXIC METALS ug/l	BOD_5 mg/l	STDS. BASE FLOW
CONTROL POINT (headwaters)									Per 100 ML				
Cherry Creek RM 317.7	--	6.9-9.1	72	3.0	—	[illegible]			160,000 250,000	2.6		16	
S.Platte River at 19th St., Denver RM 317.3	112	6.8-8.2	67	2.7		851		10.2	25,000 300,000	13.3		26	
S. Platte River at Franklin St., Denver RM 314.0		6.8-8.7	68	2.2		996		3.4	120,000 200,000	18		19	

TABLE II - AMBIENT WATER QUALITY AT NEAREST DOWNSTREAM MONITORING STATION

SOUTH PLATTE RIVER
York Street to Henderson, Colorado

Reach #4

	BASIC PARAMETERS - MG/L WHERE APPLICABLE											
Wastewater Sources & R.P.	FLOW	PH	TEMP °F	DO	TDS	TSS	NH_3-N ORG-N	TOTAL P	(FECAL) (TOTAL) BACT.	GREASE & OIL	TOXIC METALS ug/l	BOD_5 mg/l	STDS. BASE FLOW
									per 100 ml				
CONTROL POINT													
Clear Creek RM 311.1	14	7.2-8.8	76	5.0	692	-			172,000 1,720,000		Se 20 Zn 300 Mn 1000 Fe 2400	22	
S. Platte River at Henderson, CO RM 301.7	143	6.9-8.8	77	2.4	2250	1650	12.3	12.8	109,000 1,750,000		Zn 290 Pb 160 Cn 80	26	
											Cr+6 50 Cd 20 Hg 0.3		

[illegible]

Reach #5

SOUTH PLATTE RIVER BASIN

Henderson (Rm 294.4) to Colorado-Nebraska State Line

	BASIC PARAMETERS - MG/L WHERE APPLICABLE												
WATER SOURCES AND R.M.	FLOW cfs	PH S.U.	TEMP °F	DO mg/l	TDS mg/l	TSS mg/l	NH3-N ORG-N mg/l	TOTAL P (PO4)	(FECAL) (TOTAL) BACT.	GREASE & OIL	TOXIC METALS ug/l	OTHER TOXICS BOD5 mg/l	STDS. BASE FLOW
TROL POINT (headwaters)													
South Platte River downstream from Great Western at Brighton, Colorado (RM 294.4)		7.3-7.6	35-48°F	4.5					140,000 3,000,000			56	
South Platte River at St. Vrain Creek (RM 270.0)	102	7.4-8.8	78°F	4.2	1419	110	9.0	5.1	130,000 348,000		Se 10 Zn 400 Ag 3 Fe 1300	14	
Boulder Creek downstream from South Boulder Creek (RM 270.0/17.4/19.9)		6.7-7.8	57-71°F	4.7		30	3.2	1.9	58 5,500			8.8	
St. Vrain River downstream from Great Western at Longmont, Colorado (RM 270.0/20.6)	(56.0) 52.0-57.	7.7-8.4	41.55°F	0.3					96,000 740,000			65	
St. Vrain Creek at I-25 (RM 270.0/14.6)		7.5-8.3	61-75°F	6.6		79	0.4	0.5				4.4	
Little Thompson River at mouth (RM 260.4/7.0/0.1)	54	7.9-8.1	57-65°F	6.4		440	0.5		3,500 48,000		Hg .7 Cd 20 Cr 20 Cu 70 Pb 100 Zn 40	4.2	
Big Thompson River downstream from Great Western at Loveland, Colorado (RM 260.4/21.0)	9.3-25.	7.9-8.3	33-40°F	4.0					88 19,0			148	

TABLE II - AMBIENT WATER QUALITY AT NEAREST DOWNSTREAM MONITORING STATION

SOUTH PLATTE RIVER BASIN
Henderson to Colorado-Nebraska State Line (continued)

Reach #5 continued

	BASIC PARAMETERS - MG/L WHERE APPLICABLE												
WATER SOURCES AND R.M.	FLOW cfs	PH S.U.	TEMP °F	DO mg/l	TDS mg/l	TSS mg/l	NH_3-N ORG-N mg/l	TOTAL P (PO4)	(FECAL) (TOTAL) BACT.	GREASE & OIL mg/l	TOXIC METALS ug/l	OTHER TOXICS BOD_5 mg/l	STDS. BASE FLOW
TROL POINT (headwaters)													
Big Thompson River at South Platte River (RM 260.4)	11	7.2-8.8	60°F	② 2.6	2266	169	7.1	4.5	330,000 700,000		Se 20 Zn 150 Fe 900 Mn 250 Cu 80 Cd 2 Hg 1.8	88	
South Platte River at Kersey, Colorado (RM 246.5)	208	7.3-8.7	74°F	4.2	1435	147	3.6	7.9	5,400,000 16x10⁶		Se 12 Zn 70 Mn 180 Fe 900	21	
Cache La Poudre		See Tributary Work Sheet											
South Platte River downstream from Great Western discharge at Fort Morgan, Colorado (RM 195.4)		8.1-8.4	38-46°F	8.4					160 6,900			6.0	
South Platte River at Balzac, Colorado (RM 174.4)	24	7.3-9.0	84°F	4.5	1656	1180	0.9	1.9	79,000 300,000		Se 6 Zn 220 Mn 170 Fe 2000	10	
South Platte River downstream from Great Western discharge at Sterling, Colorado (RM 150.0)		8.2-8.5	36-48°F	9.1					150 1,500,000			14	
South Platte River at Julesburg, Colorado (RM 87.0)	34	7.5-8.6	82°F	4.5	1755	526	0.7	5.5	300,000 3,000,000		Hg 0.8 Se 11 Zn 580 Mn 50 Fe 1800	12	

TABLE II - AMBIENT WATER QUALITY AT NEAREST DOWNSTREAM MONITORING STATION

CACHE LA POUDRE
Fort Collins (249.0/54.0) to Greeley (249.0)

	BASIC PARAMETERS - MG/L WHERE APPLICABLE												
WATER SOURCES AND R.M.	FLOW cfs	PH S.U.	TEMP °F	DO mg/1	TDS mg/1	TSS mg/1	NH_3-N ORG-N mg/1	TOTAL P (PO_4)	(FECAL) (TOTAL) BACT.	GREASE & OIL mg/1	TOXIC METALS ug/1	OTHER TOXICS BOD_5 mg/1	STDS. BASE FLOW
NTROL POINT (headwaters)													
Cache La Poudre River at Fort Collins (RM 249.0/54.0)	6.1	7.4-9.5	66°F	5.1	148	11	0.21	0.6	172 1300			3.3	
Cache La Poudre River at Prospect Avenue in Fort Collins (RM 249.0/41.2)	(55.5) 35.8-79.5	7.3-8.3	52-59°F	7.4		19	0.3	1.3	290 15,000		Hg < .2 Cd < 20 Cr < 20 Cu < 20 Pb < 50 Zn < 20	8.2	
Cache La Poudre River downstream from Greeley STP (RM 249.0/5.2)	132	7.7-8.3	32-57°F	6.9		142			5,400 780,000			38	
Cache La Poudre River near Greeley (RM 249)	36	7.2-9.1	76°F	2.8	1638	50	3.3	6.8	490,000 >$24x10^6$		Se 13 Zn <20 Mn 200 Fe 2000	135	

TABLE II - AMBIENT WATER QUALITY AT NEAREST DOWNSTREAM MONITORING STATION

SOUTH PLATTE RIVER BASIN
Headwaters Downstream to Bowles Ave.

Reach #1

AST WATER SOURCES & R.M.	BASIC PARAMETERS - MG/L WHERE APPLICABLE													
	FLOW cfs	PH S.U.	TEMP °F	DO mg/l	TDS mg/l	TSS mg/l	NH_3-N ORG-N mg/l	TOTAL P (PO_4)	(FECAL) (TOTAL) BACT. per 100 mL	GREASE & OIL mg/l	TOXIC METALS ug/l	BOD_5 mg/l	STDS. BASE FLOW	
CONTROL POINT (headwaters)														
[illegible]h Platte River at [illegible]rton, Colo. RM 339.2	11	7.2-8.1	58	8.6	218	-	0.25 / --	1.1	490/4600		Zn 550 Fe 650 B 120	2.2	-	
So[illegible] Platte River above L[illegible]ton, Colo. RM 330.4 ([illegible] s Avenue)	54	6.6-8.6	69	② 2.0	293	809	0.8 / --	3.0	740/8000	6	Se 6.0 Zn 760 Fe 2400 Cd 4 Mn 700 B 130	4.0	-	

[illegible] WATER QUALITY AT NEAREST DOWNSTREAM MONITORING STATION

Reach #2

SOUTH PLATTE RIVER BASIN

Bowles Avenue to Exposition Avenue

	BASIC PARAMETERS - MG/L WHERE APPLICABLE												
Wastewater Sources & R.M.	FLOW cfs	PH S.U.	TEMP °F	DO mg/l	TDS mg/l	TSS mg/l	NH3-N ORG-N mg/l	TOTAL P (PO4)	(FECAL) (TOTAL) BACT. per 100 mL	GREASE & OIL mg/l	TOXIC METALS ug/l	BOD5	STDS. BASE FLOW
CONTROL POINT (headwaters)													
Bear Creek RM 326.4	1.2	7.5-8.5	69	3.8	470	-	0.8	0.8	13,000 130,000	--	Zn 700 Se 5 Fe 1100 B 220	3.2	--
South Platte River at Dartmouth Ave., Denver RM 325.9	-	6.2-8.7	67	2.4	-	933		5.0	17,000 58,000	35	--	13	--
South Platte River at Alameda Ave., Denver RM 322.7	-	6.3-8.5	67	2.6	-	808		5.6	7200 66,000	32	--	18	--

Note 1. Alameda Station just downstream from Exposition Division Point.
2. Minimum Flow in Section Bowles Ave. to Exposition Ave. is estimated to equal 100 cfs.

TABLE II - AMBIENT WATER QUALITY AT NEAREST DOWNSTREAM MONITORING STATION

Reach #3

SOUTH PLATTE RIVER
Exposition Avenue to York St., (Data at York taken at Franklin St.)

	BASIC PARAMETERS - MG/L WHERE APPLICABLE												
Wastewater Sources & R.M.	FLOW cfs	PH S.U.	TEMP °F	DO mg/l	TDS mg/l	TSS mg/l	NH_3-N ORG-N mg/l	TOTAL P. (PO_4)	(FECAL) (TOTAL) BACT. per 100 mL	GREASE & OIL mg/l	TOXIC METALS ug/l	BOD_5 mg/l	STDS. BASE FLOW
CONTROL POINT (headwaters)						--							
Cherry Creek RM 317.7	--	6.9-9.1	72	3.0	--	175			160,000 250,000	2.6		16	
S.Platte River at 19th St., Denver RM 317.3	112	6.8-8.2	67	2.7		851		10.2	25,000 300,000	13.3		26	
S. Platte River at Franklin St., Denver RM 314.0		6.8-8.7	69	2.2		996		3.4	120,000 200,000	18		19	

TABLE II - AMBIENT WATER QUALITY AT NEAREST DOWNSTREAM MONITORING STATION

SOUTH PLATTE RIVER
York Street to Henderson, Colorado

Reach #4

	BASIC PARAMETERS - MG/L WHERE APPLICABLE											
	FLOW	PH	TEMP °F	DO	TDS	TSS	NH_3-N ORG-N	TOTAL P	(FECAL) (TOTAL) BACT.	GREASE & OIL	TOXIC METALS ug/l	BOD_5 mg/l	STDS. BASE FLOW
Wastewater Sources & R.P.									per 100 ml				
CONTROL POINT													
Clear Creek RM 311.1	14	7.2-8.8	76	5.0	692	-			172,000 1,720,000		Se 20 Zn 300 Mn 1000 Fe 2400	22	
S. Platte River at Henderson, CO RM [illegible]01.7	143	6.9-8.8	77	2.4	2250	1650	12.3	12.8	109,000 1,750,000		Zn 290 Pb 160 Cn 80	26	
											Cr+6 50 Cd 20 Hg 0.3		

[illegible]

Reach #5

SOUTH PLATTE RIVER BASIN

Henderson (Rm 294.4) to Colorado-Nebraska State Line

	BASIC PARAMETERS - MG/L WHERE APPLICABLE												
WATER SOURCES AND R.M.	FLOW cfs	PH S.U.	TEMP °F	DO mg/l	TDS mg/l	TSS mg/l	NH3-N / ORG-N mg/l	TOTAL P (PO4)	(FECAL) (TOTAL) BACT.	GREASE & OIL	TOXIC METALS ug/l	OTHER TOXICS BOD5 mg/l	STDS. BASE FLOW
CNTROL POINT (headwaters)													
South Platte River downstream from Great Western at Brighton, Colorado (RM 294.4)		7.3-7.6	35-48°F	4.5					140,000 / 3,000,000			56	
South Platte River at St. Vrain Creek (RM 270.0)	102	7.4-8.8	78°F	4.2	1419	110	9.0 /	5.1	130,000 / 348,000		Sc 10 Zn 400 Ag 3 Fe 1300	14	
Boulder Creek downstream from South Boulder Creek (RM 270.0/17.4/19.9)		6.7-7.8	57-71°F	4.7		30	3.2 /	1.9	58 / 5,500			8.8	
St. Vrain River downstream from Great Western at Longmont, Colorado (RM 270.0/20.6)	(56.0) 52.0-57.6	7.7-8.4	41.55°F	0.3					96,000 / 740,000			65	
St. Vrain Creek at I-25 (RM 270.0/14.6)		7.5-8.3	61-75°F	6.6		79	0.4 /	0.5				4.4	
Little Thompson River at mouth (RM 260.4/7.0/0.1)	54	7.9-8.1	57-65°F	6.4		440	0.5 /		3,500 / 48,000		Hg .7 Cd 20 Cr 20 Cu 70 Pb 100	4.2	
Big Thompson River downstream from Great Western at Loveland, Colorado (RM 260.4/1.0)	9.3-25.3	7.9-8.3	33-40°F	4.0					88 / 39,00		Zn 40	148	

100<

TABLE II - AMBIENT WATER QUALITY AT NEAREST DOWNSTREAM MONITORING STATION

SOUTH PLATTE RIVER BASIN
Henderson to Colorado-Nebraska State Line (continued)

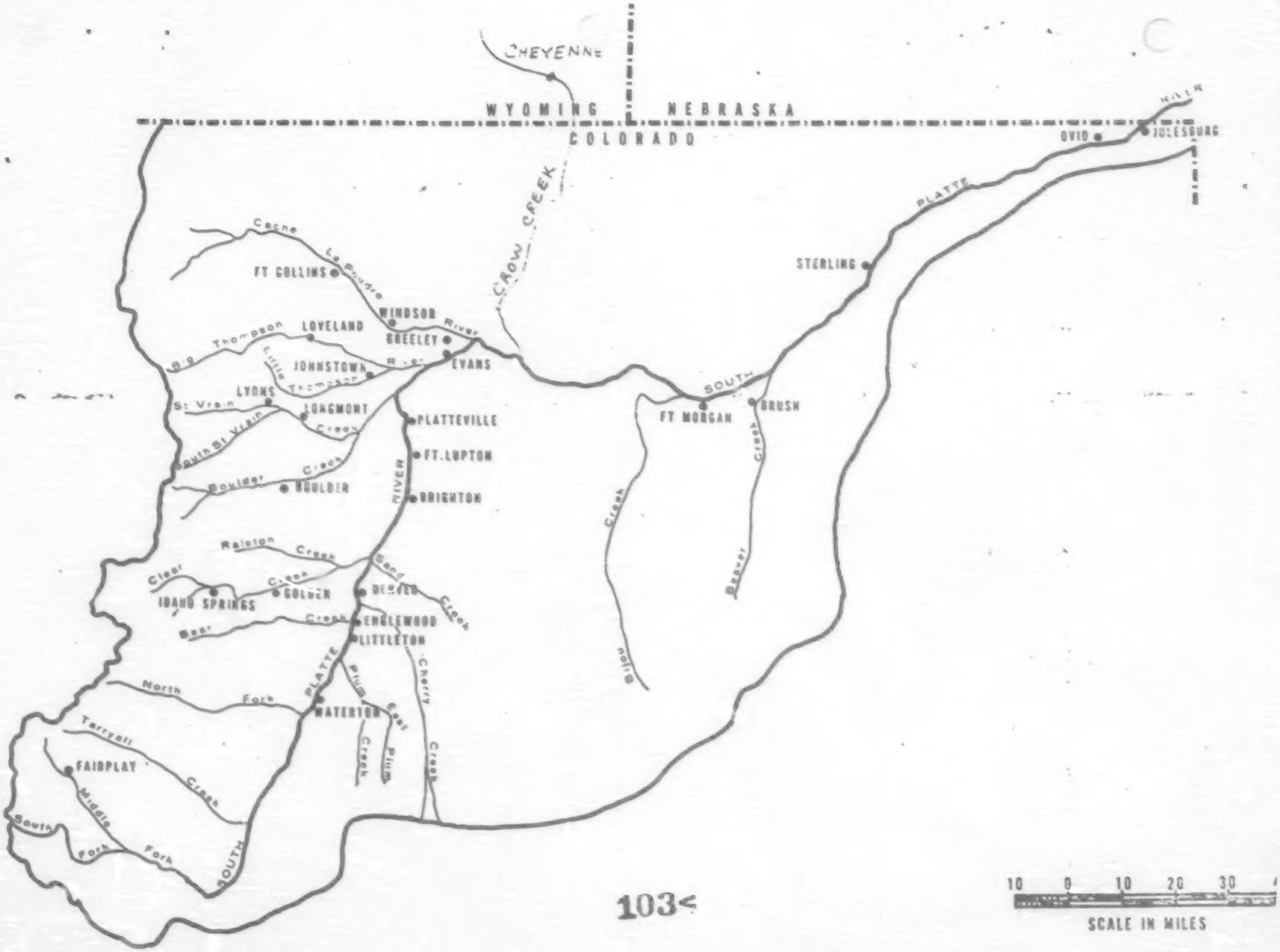
Reach #5 continued

	BASIC PARAMETERS - MG/L WHERE APPLICABLE											
WATER SOURCES AND R.M.	FLOW cfs	PH S.U.	TEMP °F	DO mg/l	TDS mg/l	TSS mg/l	NH_3-N ORG-N mg/l	TOTAL P. (PO4)	(FECAL) (TOTAL) BACT.	GREASE & OIL mg/l	TOXIC METALS ug/l	OTHER TOXICS BOD5 mg/l	STDS. BASE FLOW
CONTROL POINT (headwaters)													
Big Thompson River at South Platte River (RM 260.4)	11	7.2-8.8	80°F	2.6	2266	169	7.1	4.5	330,000 700,000		Se 20 Zn 150 Fe 900 Mn 250 Cu 80 Cd 2 Hg 1.6	88	
South Platte River at Ke[illegible] Colorado ([illegible]M 246.5)	208	7.3-8.7	74°F	4.2	1435	147	3.6	7.9	5,400,000 $16x10^6$		Se 12 Zn 70 Mn 180 Fe 900	21	
C[illegible] La Poudre		See Tributary Work Sheet											
South Platte River downstream from Great Western discharge [illegible] Morgan Colorado (RM 19[illegible] 4)		8.1-8.4	38-46°F	8.4					160 6,900			6.0	
[illegible]tte River at Balzac, ([illegible] 74.4)	24	7.3-9.0	84°F	4.5	1656	1180	0.9	1.9	79,000 300,000		Se 6 Zn 220 Mn 170 Fe 2000	10	
[illegible]te River downstream Western discharge [illegible] Colorado ([illegible] 150.0)		8.2-8.5	36-48°F	9.1					150 1,500,000			14	
[illegible] River at [illegible] Colorado ([illegible])	34	7.5-8.6	82°F	4.5	1755	526	0.7	5.5	300,000 3,000,000		Hg 0.8 Se 11 Zn 580 Mn 50 Fe 800	12	

TABLE II - AMBIENT WATER QUALITY AT NEAREST DOWNSTREAM MONITORING STATION

CACHE LA POUDRE
Fort Collins (249.0/54.0) to Greeley (249.0)

	BASIC PARAMETERS - MG/L WHERE APPLICABLE												
	FLOW cfs	PH S.U.	TEMP °F	DO mg/l	TDS mg/l	TSS mg/l	NH_3-N / ORG-N mg/l	TOTAL P (PO4)	(FECAL) / (TOTAL) BACT.	GREASE & OIL mg/l	TOXIC METALS ug/l	OTHER TOXICS BOD_5 mg/l	STDS. BASE FLOW
WATER SOURCES AND R.M.													
CONTROL POINT (headwaters)													
Cache La Poudre River at Fort Collins (RM 249.0/54.0)	6.1	7.4-9.5	66°F	5.1	148	11	0.21 /	0.6	172 / 1300			3.3	
Cache La Poudre River at Prospect Avenue in Fort Collins (RM 249.0/41.2)	(55.5) 35.8-79.5	7.3-8.3	52-59°F	7.4		19	0.3 /	1.3	290 / 15,000		Hg <.2 Cd <20 Cr <20 Cu <20 Pb <40 Zn <20	8.2	
Cache La Poudre River [illegible] from Greeley STP (RM 249.0/5.2)	132	7.7-8.3	32-57°F	6.9		142			5,400 / 780,000			38	
Cache La Poudre River near [illegible] (RM 2[illegible])	36	7.2-9.1	76°F	2.8	1638	50	3.3 /	6.8	490,000 / $>24\times10^6$		Se 13 Zn <20 Mn 200 Fe 2000	135	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WYOMING
NEBRASKA
COLORADO
RIVER
OVID
JULESBURG
PLATTE
CROW CREEK
STERLING
Cache
La Poudre
FT COLLINS
WINDSOR
River
Big
Thompson
LOVELAND
GREELEY
Little
Thompson
JOHNSTOWN
River
EVANS
SOUTH
FT MORGAN
BRUSH
LYONS
St Vrain
LONGMONT
Creek
PLATTEVILLE
South St Vrain
FT. LUPTON
Boulder
Creek
BOULDER
RIVER
BRIGHTON
Creek
Creek
Beaver
Ralston
Creek
Sand
Clear
Creek
IDAHO SPRINGS
GOLDEN
DENVER
Creek
Bear
Creek
ENGLEWOOD
LITTLETON
Bijou
PLATTE
Plum
Cherry
North
Fork
WATERTON
East
Creek
Plum
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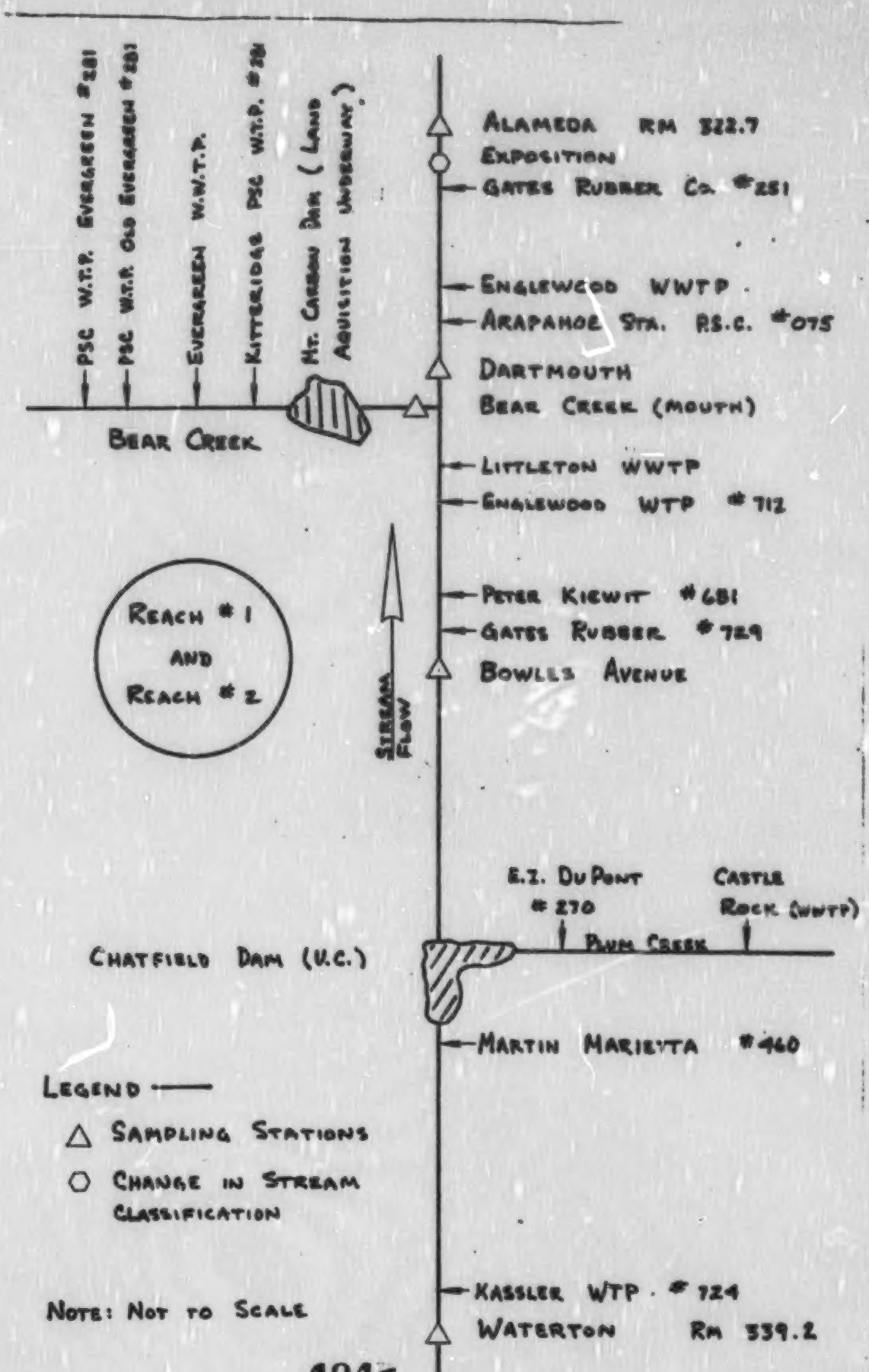
SCALE IN MILES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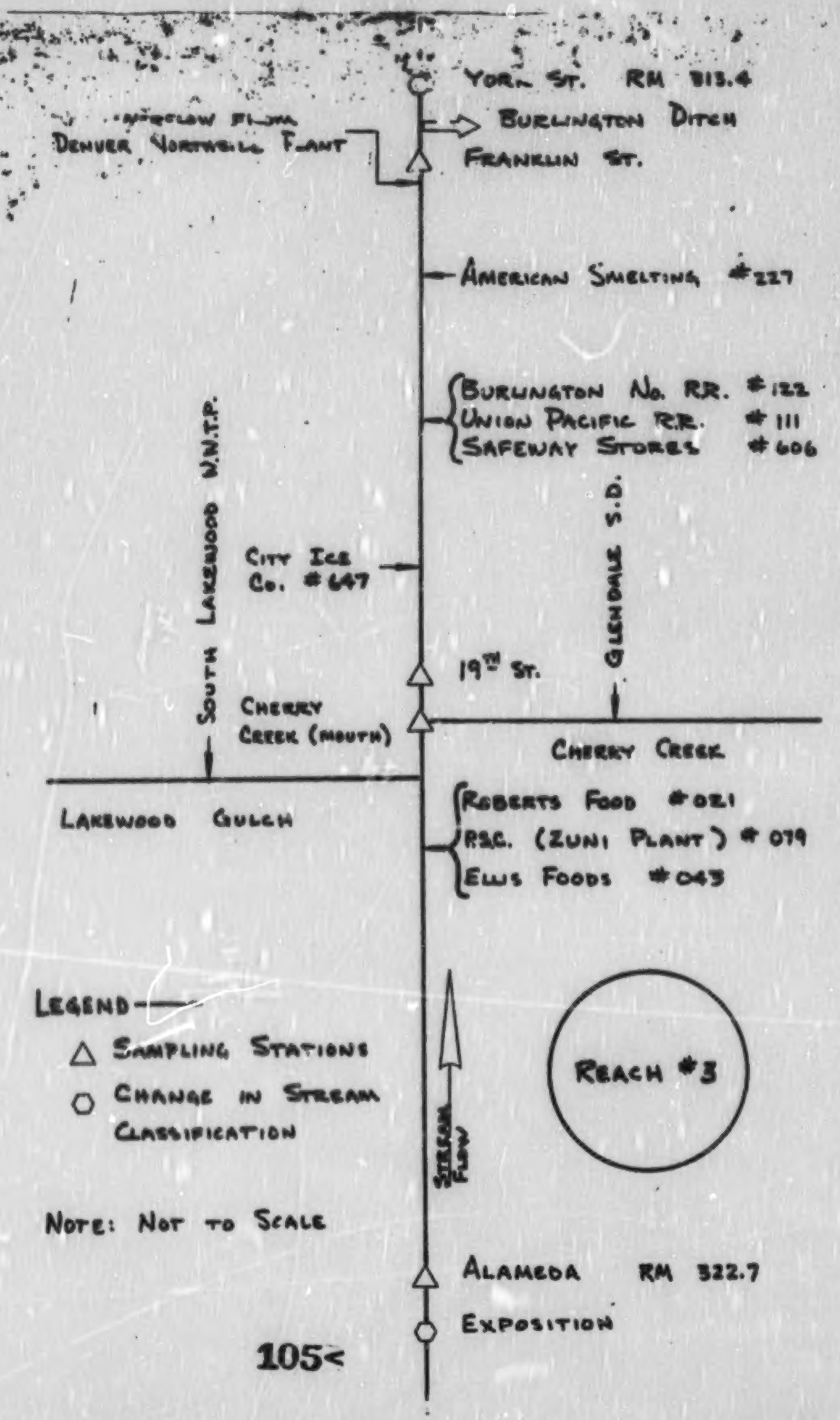
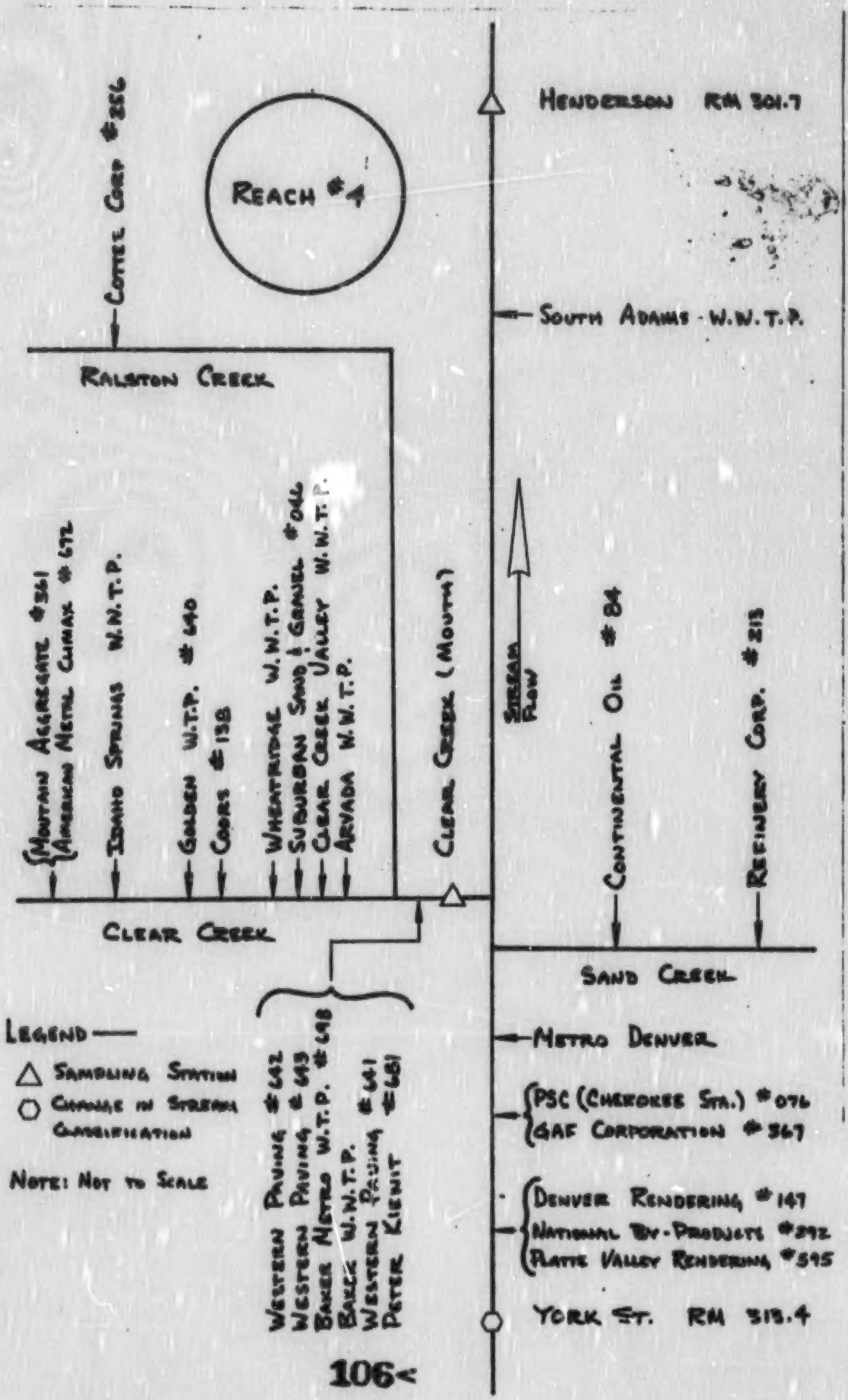
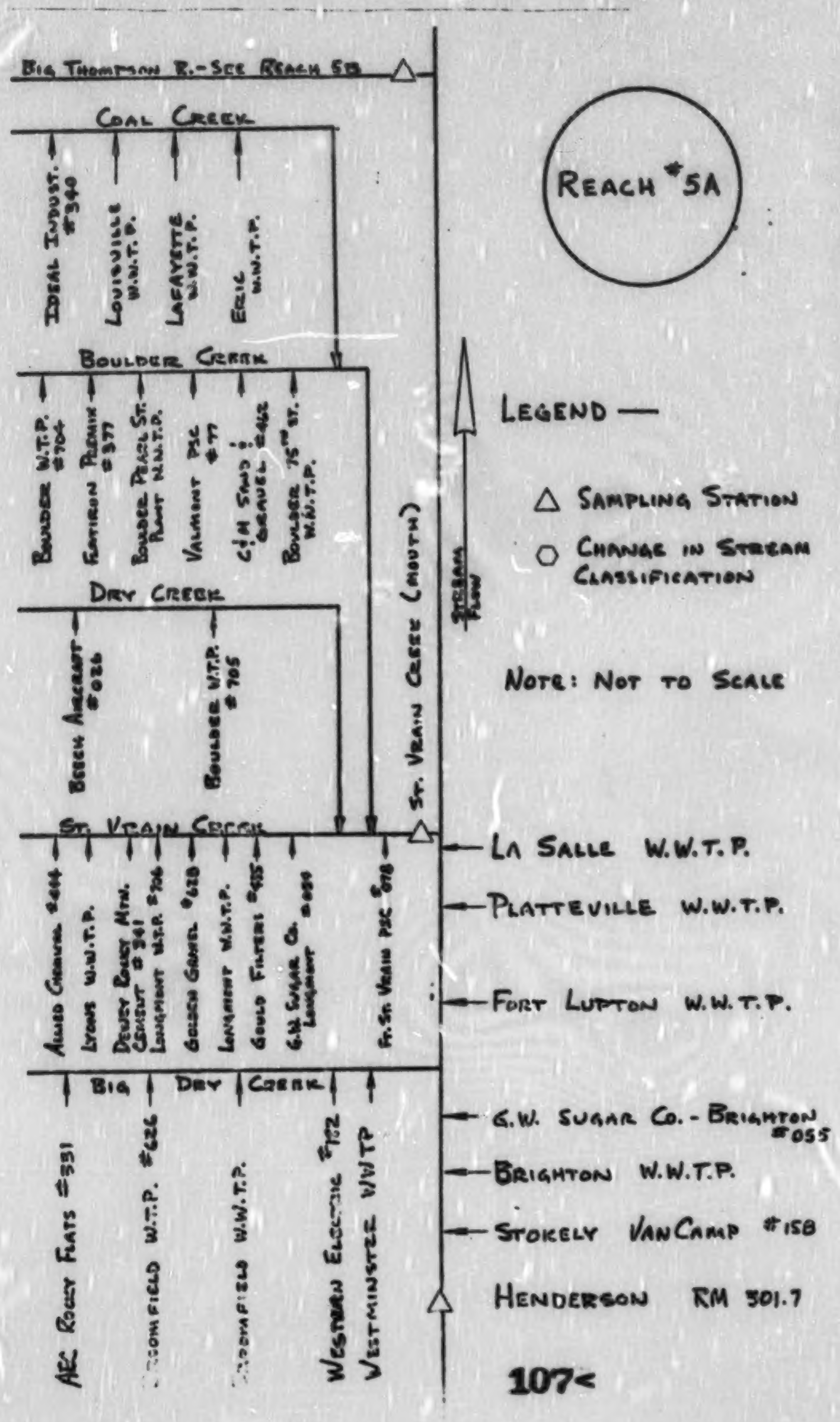
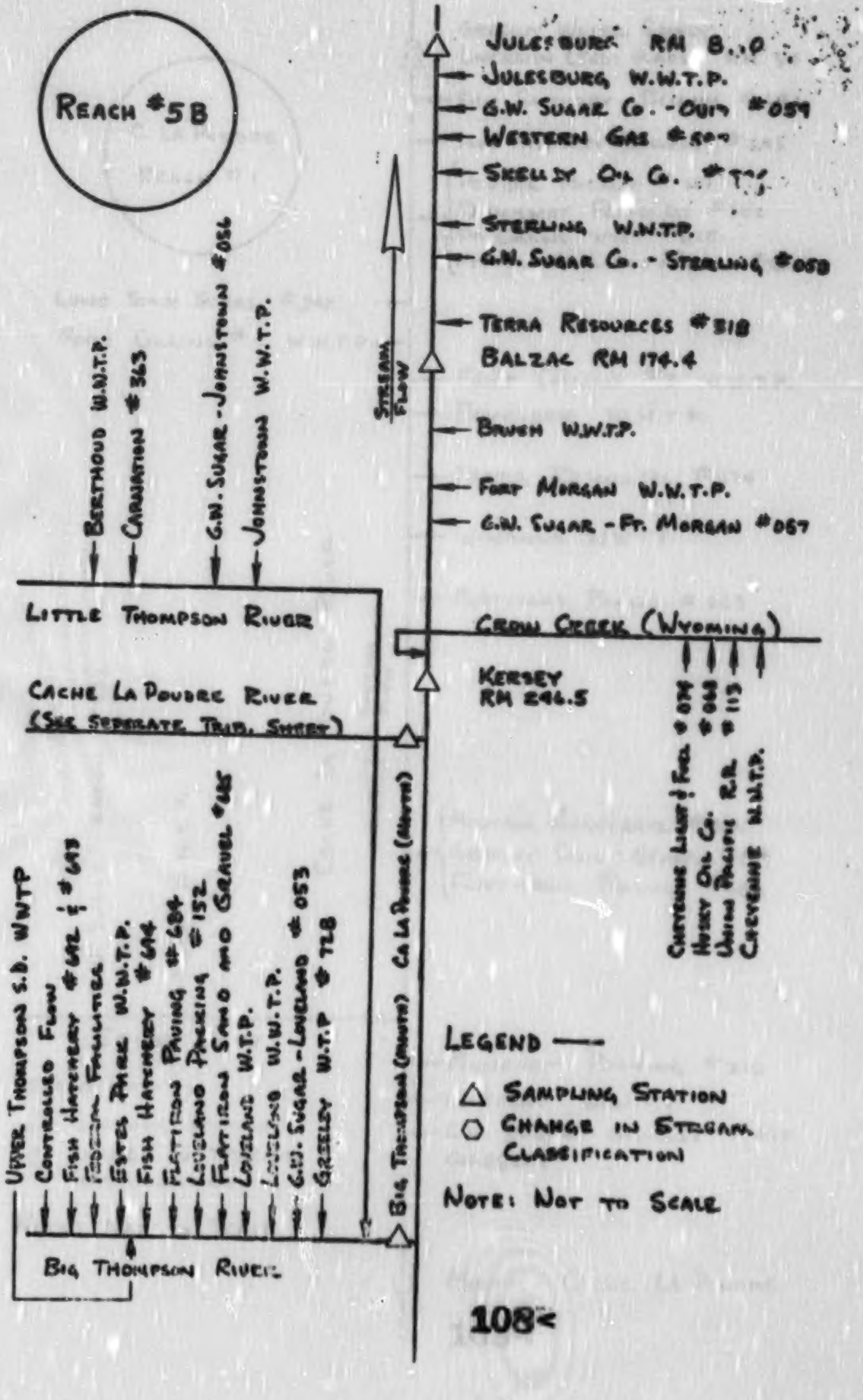
PSC W.T.P. Old Evergreen #281
Evergreen W.W.T.P.
Kitteridge PSC W.T.P. #281
Mt. Carbon Dam (Land Aquisition Underway)
Alameda RM 322.7
Exposition
Gates Rubber Co. #251
Englewood WWTP
Arapahoe Sta. P.S.C. #075
Dartmouth
Bear Creek (mouth)
Bear Creek
Littleton WWTP
Englewood WTP #712
Peter Kiewit #681
Gates Rubber #729
Bowles Avenue
Reach #1 and Reach #2
Stream Flow
E.I. Du Pont #270
Castle Rock (WWTP)
Plum Creek
Chatfield Dam (U.C.)
Martin Marietta #460
Legend
△ Sampling Stations
○ Change in Stream Classification
Kassler WTP #724
Waterton Rm 339.2
Note: Not to Scale


York St. RM 313.4
Inflow From
Denver Northside Plant
Burlington Ditch
Franklin St.
American Smelting #227
Burlington No. RR. #122
Union Pacific R.R. #111
Safeway Stores #606
South Lakewood W.W.T.P.
Glendale S.D.
City Ice Co. #647
19th St.
Cherry Creek (mouth)
Cherry Creek
Lakewood Gulch
Roberts Food #021
P.S.C. (Zuni Plant) #079
Ellis Foods #043
Legend
Sampling Stations
Change in Stream Classification
Stream Flow
Reach #3
Note: Not to Scale
Alameda RM 322.7
Exposition


REACH #4
HENDERSON RM 301.7
SOUTH ADAMS W.W.T.P.
COFFEE CORP #256
RALSTON CREEK
MOUNTAIN AGGREGATE #361
AMERICAN METAL CLIMAX #672
IDAHO SPRINGS W.W.T.P.
GOLDEN W.T.P. #640
COORS #138
WHEATRIDGE W.W.T.P.
SUBURBAN SAND & GRAVEL #044
CLEAR CREEK VALLEY W.W.T.P.
ARVADA W.W.T.P.
CLEAR CREEK (MOUTH)
STREAM FLOW
CONTINENTAL OIL #84
REFINERY CORP. #213
CLEAR CREEK
SAND CREEK
WESTERN PAVING #642
WESTERN PAVING #643
BAKER METRO W.T.P. #698
BAKER W.W.T.P.
WESTERN PAVING #641
PETER KIEWIT #681
METRO DENVER
PSC (CHEROKEE STA.) #076
GAF CORPORATION #367
DENVER RENDERING #147
NATIONAL BY-PRODUCTS #392
PLATTE VALLEY RENDERING #595
YORK ST. RM 313.4
LEGEND —
△ SAMPLING STATION
⬡ CHANGE IN STREAM CLASSIFICATION
NOTE: NOT TO SCALE


Big Thompson R. - See Reach 5B
Coal Creek
Ideal Indust. #340
Louisville W.W.T.P.
Lafayette W.W.T.P.
Erie W.W.T.P.
Boulder Creek
Boulder W.T.P. #704
Flatiron Premix #377
Boulder Pearl St. Plant W.W.T.P.
Valmont PSC #77
C & M Sand & Gravel Eagle
Boulder 75th St. W.W.T.P.
Dry Creek
Beech Aircraft #026
Boulder W.T.P. #705
St. Vrain Creek
Allied Chemical #444
Lyons W.W.T.P.
Dewey Rocky Mtn. Cement #341
Longmont W.T.P. #706
Golden Gravel #628
Longmont W.W.T.P.
Gould Filters #435
G.W. Sugar Co. Longmont #059
Ft. St. Vrain PSC #078
Big Dry Creek
AEC Rocky Flats #551
Broomfield W.T.P. #626
Broomfield W.W.T.P.
Western Electric #152
Westminster WWTP
St. Vrain Creek (mouth)
Stream Flow
La Salle W.W.T.P.
Platteville W.W.T.P.
Fort Lupton W.W.T.P.
G.W. Sugar Co. - Brighton #055
Brighton W.W.T.P.
Stokely VanCamp #158
Henderson RM 301.7
Reach #5A
Legend —
△ Sampling Station
○ Change in Stream Classification
Note: Not to Scale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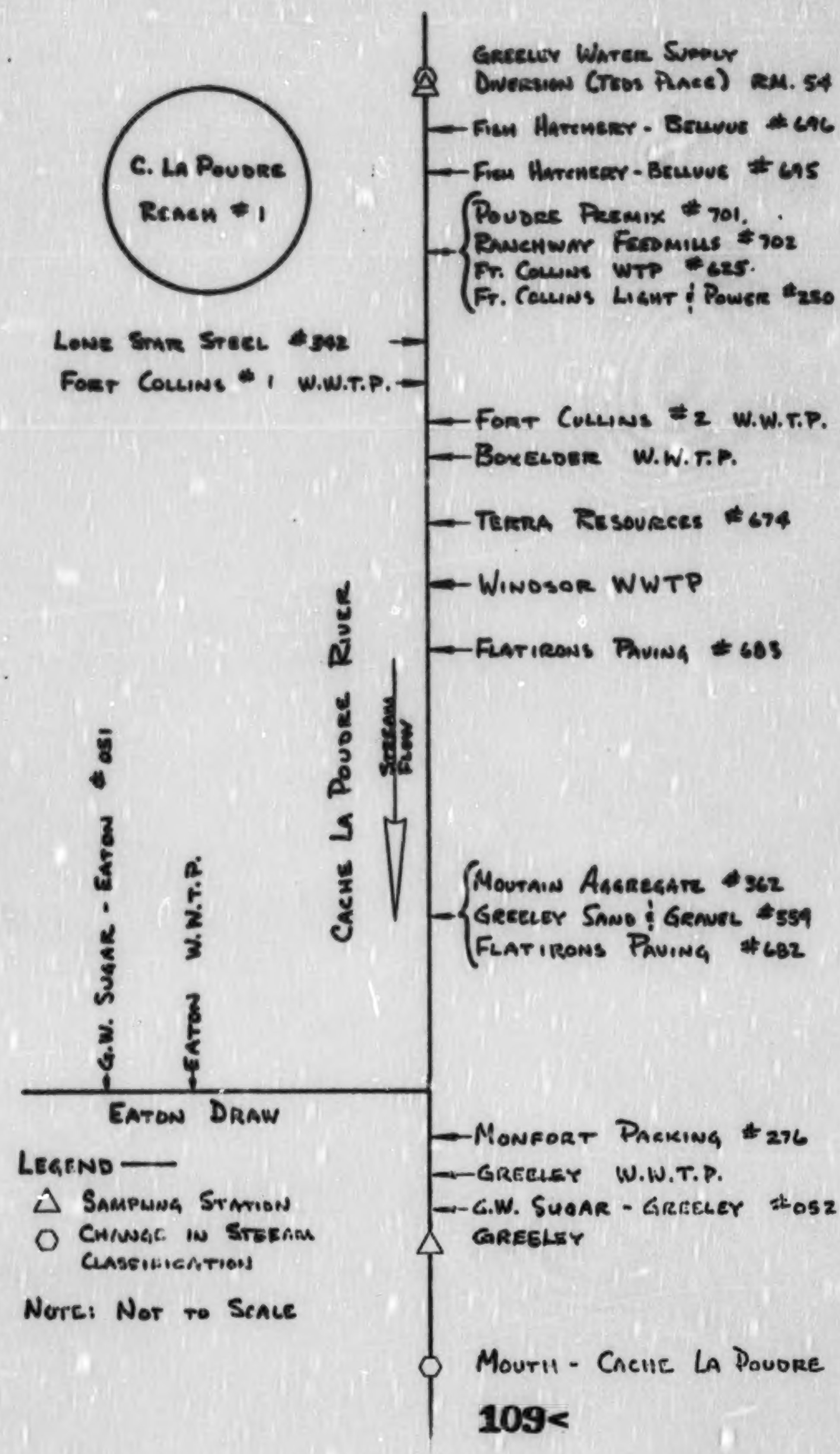
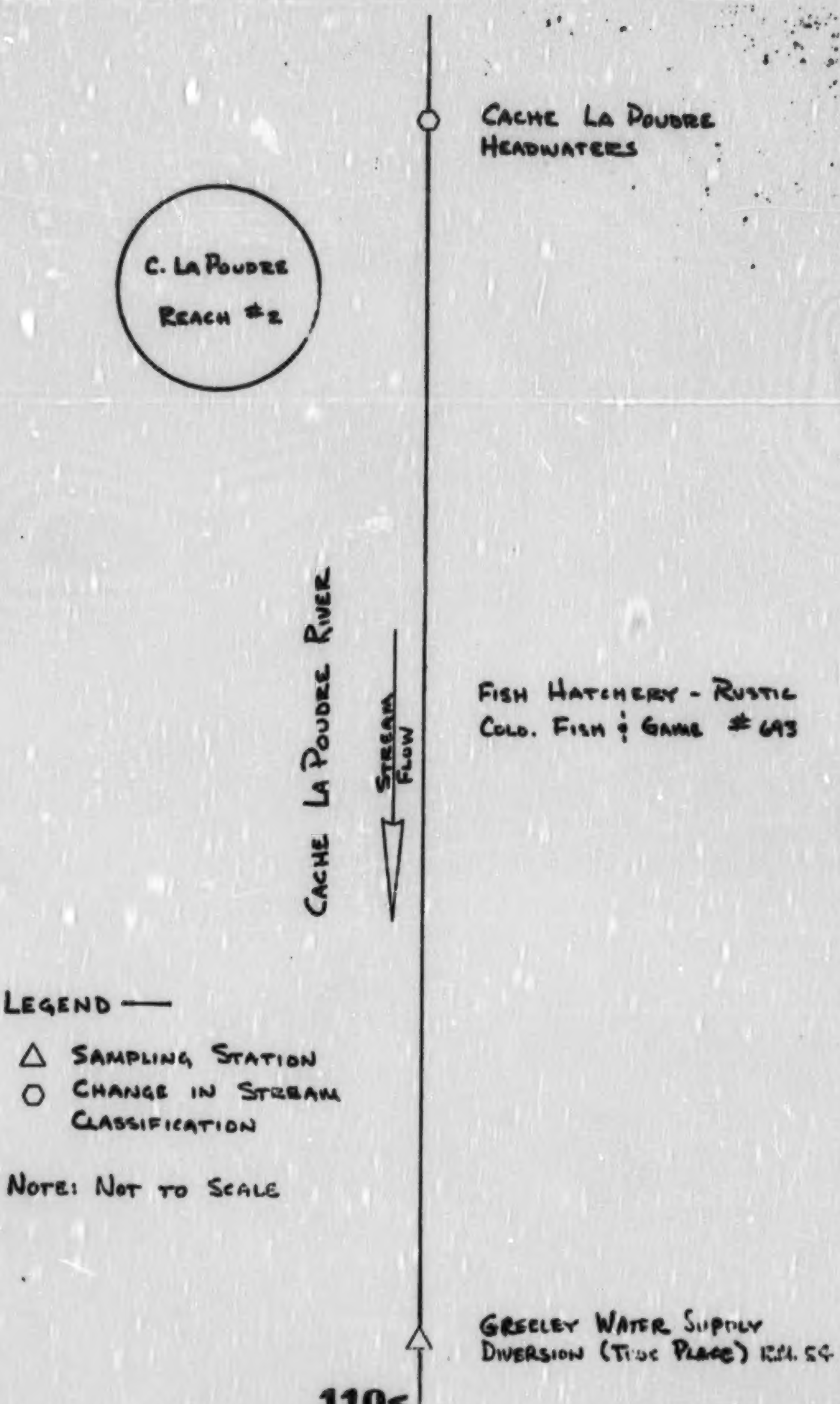
G.W. SUGAR CO. - OVID #059
WESTERN GAS #500
SKELLY OIL CO. #T??
STERLING W.W.T.P.
G.W. SUGAR CO. - STERLING #058
TERRA RESOURCES #318
BALZAC RM 174.4
BRUSH W.W.T.P.
FORT MORGAN W.W.T.P.
G.W. SUGAR - FT. MORGAN #057
STREAM FLOW
BERTHOUD W.W.T.P.
CARNATION #363
G.W. SUGAR - JOHNSTOWN #056
JOHNSTOWN W.W.T.P.
LITTLE THOMPSON RIVER
CROW CREEK (WYOMING)
KERSEY
RM 246.5
CHEYENNE LIGHT & FUEL #074
HUSKY OIL CO. #088
UNION PACIFIC R.R. #113
CHEYENNE W.W.T.P.
CACHE LA POUDRE RIVER
(SEE SEPERATE TRIB. SHEET)
BIG THOMPSON (MOUTH)
CA LA POUDRE (MOUTH)
UPPER THOMPSON S.D. WWTP
CONTROLLED FLOW
FISH HATCHERY #682 & #683
FEDERAL FACILITIES
ESTES PARK W.W.T.P.
FISH HATCHERY #686
FLATIRON PAVING #684
LOVELAND PACKING #152
FLATIRON SAND AND GRAVEL #685
LOVELAND W.T.P.
LOVELAND W.W.T.P.
G.W. SUGAR - LOVELAND #053
GREELEY W.T.P #728
BIG THOMPSON RIVER
LEGEND —
△ SAMPLING STATION
○ CHANGE IN STREAM CLASSIFICATION
NOTE: NOT TO SCALE


GREELEY WATER SUPPLY DIVERSION (TEDS PLACE) R.M. 54
FISH HATCHERY - BELLVUE #696
FISH HATCHERY - BELLVUE #695
POUDRE PREMIX #701
RANCHWAY FEEDMILLS #702
FT. COLLINS WTP #625
FT. COLLINS LIGHT & POWER #250
C. LA POUDRE REACH #1
LONE STAR STEEL #342
FORT COLLINS #1 W.W.T.P.
FORT COLLINS #2 W.W.T.P.
BOXELDER W.W.T.P.
TERRA RESOURCES #674
WINDSOR WWTP
FLATIRONS PAVING #683
CACHE LA POUDRE RIVER
STREAM FLOW
G.W. SUGAR - EATON #051
EATON W.W.T.P.
MOUTAIN AGGREGATE #362
GREELEY SAND & GRAVEL #559
FLATIRONS PAVING #682
EATON DRAW
MONFORT PACKING #276
GREELEY W.W.T.P.
G.W. SUGAR - GREELEY #052
GREELEY
LEGEND —
△ SAMPLING STATION
○ CHANGE IN STREAM CLASSIFICATION
NOTE: NOT TO SCALE
MOUTH - CACHE LA POUDRE


CACHE LA POUDRE
HEADWATERS
C. LA POUDRE
REACH #2
CACHE LA POUDRE RIVER
STREAM
FLOW
FISH HATCHERY - RUSTIC
COLO. FISH & GAME #693
GREELEY WATER SUPPLY
DIVERSION (TIDE PLACE) R.M. 54
LEGEND —
△ SAMPLING STATION
○ CHANGE IN STREAM
CLASSIFICATION
NOTE: NOT TO SCALE

MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE		FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC	TOT BAC	OIL & GREASE	TOX MET	OTHER
S P STEM - WATERTON TO BOWLES AVE														
DENVER STH SUB WTP PM 336	#724	.17	7.8	3 72	[illegible]	1 366	3 2694			ND	ND		ND	[illegible]
MARTIN MARIETTA	#460	.55	7.6	62	87	/ 1239	/ 138	NA					1.6 AG 5 1.23CR	[illegible]
CASTLE ROCK PL CH RM 332/15		.2			/ 686								NA	[illegible]
EI DUPONT	#270	.9	7.6	62 57	/ 319	/ 4400	/ 51	600					[illegible]	[illegible]

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MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE		FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC	TOT BAC	OIL & GREASE	TOX MET	OTHER	
S PLATTE R - BOWLES AVE TO EXPOSITION AV															
PETER KIEWIT RM 330	#687	.03	7.9	95	/ <1	/ 70	/ 15					/ 1	ND		4/-
GATES RUBBER RM 330	#729	.03	7.6	70	/ 100	/ 930	/ 140	3	6		NT	3 60			6/10
ENGLEWOODWTP RM 328	#712	.28	7.6	55	/ 18	/ 803	/ 411				.5 ND	0	.16 CU .46 ZN		3.5/-
LITTLETON RM 327.6		5.2			/ 1400	3 26500	/ 1700				<96				5/7
P S CO WTP- EVGN RM 326/30	#281	.03	7.7	60	/ 1	/ 10	/ 30								3/-
P S CO WTR-OLD EV RM 326/30	#282	.03	7.0	60	/ 2	/ 10	/ 40								3/-
EVERGREEN WWTP RM 326/25		.2			/ 200	.5	/ 200			.5					3/-
P S CO. WTP-KTRG RM 336/20	#280	.003	7.7	60	/ <1	/ 7	/ 10			.5					3.5/-
P S CO-ARAPAHOE RM 328	#075	1.3	8.9	69	/ 51	/ 13164	/ 304						.5		3.5/-
W ENGLEWOOD RM 325.1		8.6			3 6200	3 53211	3 9700				<240				9/7
GATES RUBBER CO RM 320	251	1.8	8.0	HOT?	/ 140	/ 4581	/ 327					5 125	.79CR .3 5 .896PB		13/3

MAJOR POLLUTI SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

S PLATTE R - EXPOSITION AVE TO YORK ST

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC	TOT BAC	OIL & GREASE	TOX MET	OTHER	
SO LAKEWOOD RM 318.9	1.8			1 500	1 7900	1 900				.5				3.5/1
ROBERTS FOOD RM 319 #021	.072	6.7	59 69	0	1 685	0								1/-
P S CO- ZUNI #079 RM 318	44.	7.9	MJ 79 SM 95	1 150	3 19600	1 400								5/-
ELLIS FOOD RM 318 #043	.06	7.6	83	0	1 75	0								1/-
GLENDALE SD- CH CR RM 317.7/5	.3			1 20	0	1 50				220				2/-
CITY ACE M 317 #647	.4	7.7	72	1 7	1 2837	1 3								3/-
BURLINGTON NO RM 316 #122	NO REG DISCHARGE- NO DATA													
UNION PACIFIC RR RM 316 #111	.077	11.0	90 105	1 276	1 344	1 163					3 275	.004		6/10
SAFEWAY STORES RM 316 606	.07	8.1	65	1 4	1 296	1 4								3/-
AMERICAN SMELTING RM 315 #227	1.008	9.5	43	1 105	1 3789	1 181					1 4	15CU 5 8PB ZN		9/7

MAJOR POLLUT I SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

AST WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC	TOT BAC	OIL & GREASE	TOX MET	OTHER
PL TE R - YORKE ST TO HENDERSON													
DENVER RENDERING RM 313	.86	6.8	70	1 56	1 1586	1 504				.5	.5		4/-
NATIONAL BY-PROD RM 313 #292	.18	7.3	75	1 <1	1 527	1 14					1 8.5		4/-
PLATTE VALLEY REN RM 313 #595	.19	7.8	70 75	1 <1	1 49	1 <1	2			.5 >240	1 .15		4.5/-
P S CU CHEROKEE RM 313 #076	6.5	7.7	71 83	1 652	3 40599	3 3908							7/9
GAF CORP RM 312 #367	.027	6.0	80 95	1 <1	1 45	1 29					3 6.5		6/10
METRO DENVER RM 312.2	116.			5 30000	5 602700	5 118000				3 <4700			18/1
CONTINENTAL OIL RM 312.1 #084	.65	8.0	88 84	1 135	1 6850	1 130	216	5			5 81	. 3CR 5 190	13/3
REFINERY CORP RM 312.1 #213	.144	7.8	83 78	1 60	1 1950	1 ~~54~~ 22	~~4~~ 54	3 6			18.6		6/10
MTN AGGR- CLR CR RM 311.1/49 #361	.2					.5							.5/-
AMERICAN MTL CLMX RM 311.1/49 #672	8.93	7.4	53 46		3 26300	1 515				0 49		MO,MN 5 ZN	9/7
IDAHO SPGS RM 311.1/38.7	.3			1 160	.5	1 80				.5 240000			3/-
GOLDEN WTP RM 311.1/19 #640	.59	7.6	45	.5 ND	.5 ND	.5 ND						CU .5 MGL	1.5/-

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MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

AST WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC TOT BAC BAC	OIL & GREASE	TOX MET	OTHER	
PLATTE R - YORKE ST TO HENDERSON													
COORS RM 311.1/18 #138	23.	7.0	65	3 8200	3 35500	3 3700	575		<2 1300	5 669			14/2
WHE\TRIDGE SD RM 311.1/7.7	2.1			3 2400	/ 10550	/ 1500			700 54000				5/1
SUB SAND & GR RM 311.1/7.5#046	.58	7.7	80	NA	/ 1230	/ 1450			—				2/-
CLEAR CR VALLEY SD RM 311.1/7.0	.5			/ 350	/ 17100	/ 800			.5 380				3.5/1
ARVADA SD RM 311.1/6.7	1.1	NA	NA	/ 280	/ 5150	/ 450			<39 <1600	NA	NA		3/1
COTTER CORP #256 RM 311.1/65/12	.072	7.9	NA	/ <1	/ 625	/ 107	<1	.2	NA	/ .6	NA	5 1.9 AL RA226	9/7
WESTERN PVG #642 RM 311.1/4.0	.085	7.8	55	/ 1	/ 588	/ 3			NA	3 5.7	NA		6/10
WESTERN PVG #643 RM 311.1/3.8	.085	7.9	55	/ 4	/ 291	/ 9			NA	3 6.4	NA		6/10
BAKER METRO WTP RM 311.1/4 #698	.084	7.6	68	NA	/ 315	NA			NA	0	NA		1/-
BAKER WSD RM 311.1/3.4	1.0	NA	NA	/ 580	/ 9670	/ 330			<7 <66	NA	NA		3/1
WESTERN PVG #641 RM 311.1/2.5	.10	8.0	55	/ 1	/ 480	/ 5			NA	3 2.1			6/10
PETER KIEWIT #681 RM 311.1/2.0	.03								<				
SO ADAMS WSD RM 306.7	1.8			/ 930	/ 15200	/ 2200			48 650				3/-

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MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC TOT BAC	OIL & GREASE	TOX MET	OTHER	
S PLATTE R - HENDERSON TO STATE LINE													
STOKELY VN CP #158 RM 296	.063	7.7	90 85	/ <1	/ 551	/ 1				/ <.05			4/-
BRIGHTON WWTP RM 295.8	1.3			/ 580	3 15900	/ 900			.86E6 5 >2.7E6				10/6
GW SUGAR-BRTN #055 RM 295.6	2.5	8.3	19 64	/ 230	3 20000	/ 170	105 67	3.1	130 2000				5/-
USAEC #331 RM 290/30	.31	7.8	65 75	/ 17								5 POT RAD	6/10
BROOMFIELD WTP#626 RM 290/25	.08	7.4	65										0/-
BROOMFIELD WWTP RM 290/20	.8			/ 110		/ 10			0.5 ? 50000				2.5/-
WESTERN ELECT #182 RM 290/17	.13	8.0	70 75	NA	/ 1050	0							1/-
WESTMINSTER WWTP	0.												1/-
FORT LUPTON WWTP RM 287.6	.8			/ 310		/ 300			8900 3 40000				5/-
PLATTEVILLE WWTP RM 276	.1			/ 40		/ 90			.5 30000				2.5/-
LA SALLE WWTP RM 273	.1			/ 30		/ 30			.5 2100				2.5/-
ALLIED CHEM 444 RM 270/49	.01			/ 28	/ 2587	/ 426				3 3.8	PB ZN 5 197		11/5

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MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN.

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC TOT BAC BAC	OIL & GREASE	TOX MET	OTHER
S PLATTE R - HENDERSON TO STATE LINE												
LYONS WWTP RM 270/39	.1			/ 30		/ 20			6100 66000	/		3/-
DEWEY RKY MTN #341 RM 270/37	.002	7.3	73	/ <1	/ 20	/ <1				/ .045		4/-
LONGMONT WTP #706 RM 270/35	1.63	6.9	60									0/-
GOLDEN GRAVEL #628 RM 270/25	.004	7.5	63	NA	/ 27	/ <1						2/-
LONGMONT WWTP RM 270/23	~~8~~3.7			/ 1850	32000	/ 2000			34 220034	.5		2.5/-
GOULD FILTER #435 RM 270/22	.038	7.0	73 80									0/-
GW SUGAR LNGMT#054 RM 270/21	7.0	8.3	118 99	3 2700	3 73200	3 2800	385 100	.6	40E3 180E3	5		14/2
BEECH AIRCRFT #026 RM 270/18/15	.003	7.0	70 80	/ 3	/ 26	/ <1					5 5.2	8/8
BOULDER WTP #705 RM 270/18/10	3.15	7.0	65	.5 ND	.5 ND	.5 ND						1.5/-
BOULDER WTP #704 RM 270/18/10	1.53	6.5	50	.5 ND	.5 ND	.5 ND						1.5/-
FLATIRON PRMX #377 RM 270/17.6/22	3.2	7.5	75	/ 106	/ 4565	/ 34			NA			3/-
BOULDER-PRL ST PL RM 270/17.6/21.3	4			/ 1520	/ 10600	/ 1200			16 290			3/-
S CG- VLMNT #077 RM 270/	9.9	8.3	79	/ 248	/ 14328	/ 1242			NA			3/-

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MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

AST. WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC TOT BAC BAC	OIL & GREASE	TOX MET	OTHER
S PLATTE R - HENDERSON TO STATE LINE												
C+M SAND & GR #462 RM 270/17.6/20	.8	6.5-8.	38 70	/ 7	/ 2650	/ 40			NA			3/-
BOULDER-7 ST PL RM 2/0/17.6/17.8	7.8			3 2660	3 26600	/ 1400			<40 <1600			7/9
IDEAL IND #340 RM 270/17.6/7.9/19	.064	7.5	64	/ 6	/ 121	/ 1			NA	NA	NA	3/-
LOUISVILLE SD RM 270/17.6/7.9/9	.2			/ 150		/ 290			2700 240000	NA	NA	2/-
LAFAYETTE SD RM 270/17.6/7.9/5	.1			/ 60		/ 70			<20 35000	NA	NA	2/-
ERIE SD RM 270/17.6/7.9/1	.1			/ 120		/ 160			NA .5 24000	NA	NA	2.5/-
PS CO-ST VR RM 270/1 #078	3.0	7.8	90	/ 252	3 52920	/ 252			NA	NA	NA	5/-
US RKY MTN NTL PK RM 260/60 BG T R	.024	6.4	54	5								
US RKY MTN NTL PK RM 260/70 MN V C	.002	5.6	51	<1								
US RKY MTN NTL PK RM 260/60/8 FL R	.004	6.0	60	<1								
US FITZSIMONS HOSP RM 311.1/5	.23			23								
US RKY MTN ARS RM 318/4	.2	7.7		41								
US BUCKLEY ANG RM 311.1/9	.09			60								

MAJOR POLLUTI SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE-WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC	TOT BAC	OIL & GREASE	TOX MET	OTHER	
S PLATTE R - HENDERSON TO STATE LINE														
COLO F&G-ESTES#692 RM 260.4/60.5	1.8	7.5	45 57	1 30	1 670	1 75	30		<3	460	NA	NA		3/-
ESTES PK SD RM 260.4/54.5	.9			1 210	NA	1 730	15		NA	220	NA	NA		2/-
UPPER THOMPSON SD RM 260.4/48	0.			1	1	1								
COLO F&G-DRAKE#694 RM 260/42	3.9	7.5	51	1 36	1 1660	1 228	60		<3	29	NA	NA		3/-
FLATIRON PVG #684	3.0	6.5-8.5	76	NA		3 43800				NA	NA	NA		3/-
LOVELAND PKG #142	.05	7.3	55 58	1 72	1 276	1 50			<1		<1	3 18		3/-
FLATIRON SAND & GR #685	2.5	6.5-8.5	75	NA	1 15000	.5				NA	NA			1.5/-
LOVELAND WTP #675 RM 260/	.15	7.5	48	NA	NA	NA				NA	NA			0/-
LOVELAND WWTP RM 260/24.5	2.7			1 1350	16000	1 1100		2.0	1000 .5	17000	NA	NA	.3 RES	2.5/-
GW SUGAR-LVLD #053 RM 260/22.5	8.2	8.2		1 900	3 26900	3 5600			200	1350	NA	NA		7/9
GREELEY WTP #728 RM 260.4/	.12	7.4	55	NA	NA	NA				NA	NA	NA		0/-
BERTHOUD RM 260.4/7.0/12	.2	NA	NA	1 90	NA	1 120			NA 5	2200000				7/9
CARNATION #363 RM 260.4/7.0/4	.05	6.7	10 15	.5 NA	.5 NA	.5 NA			.5	NA	NA	NA		2/-

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MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC TOT BAC	OIL & GREASE	TOX MET	OTHER
PLATTE R - HENDERSON TO STATE LINE												
GW SUGAR-JNSTN#056 RM 260.4/7.0/7	4.0	8.0	54 75	3 4200	3 49500	3 3500	254 183	2.3	40000 5 180000	NA	NA	14/2
JOHNSTOWN RM 260.4/7.0/2.0	.2	NA	NA	/ 60	NA	/ 100			NA			2/-
COLO F&G-RSTC #693 RM 249/74	7.4	7.6	42	/ 120	/ 4165	/ 185	123		<3 >1100	0	NA	3/-
COLO F&G-BLV #696 RM 249/49	1.5	7.5	53	/ 7	/ 5212	/ 88	25		<3 >1100		NA	3/-
COLO F&G-BLV #695 RM 249/47	11.5	7.5	49	/ 105	/ 13550	/ 950	192		<3 23	0	NA	3/-
POUDRE PREMIX #701 RM 249/46	.004	8	60 70	NA	NA	NA			NA	NA	NA	0/-
RANCHWAY FDMLS#702 RM 249/46	.00006	11.2	76	0	/ <1	/ <1			NA	NA	NA	2/-
FT COLLINS WPT#625 RM 249/46	.7	6.5	40	NA	NA	NA			NA	0	NA	0/-
FT COLLINS L&P#250 RM 249/46	.31	6.5	150 59	/ 1	/ 165	0				0		2/-
LONE STAR STL #342 RM 249/45	.03	6.9	60	/ 1	/ 47	/ 1			0	0	0	3/-
FT COLLINS #1 PL RM 249/44.1	3.9			3 1910	/ 12520	3 3580			.5 720000			7.5/9
FT COLLINS #2 PL RM 249/40.2	3.9			/ 1270	/ 10020	/ 980			.5 710000			3.5/9
BOXELDER SD RM 249/39.2	.3			/ 110		/ 40			.5 3000000			2.5/9

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MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

WASTE WATER SOURCE	FLOW MGD	PH	TEMP F	BOD5	TDS	TSS	NH3-N ORG-N	TOT P	FEC BAC	TOT BAC	OIL & GREASE	TOX MET	OTHER	
S PLATTE R - HENDERSON TO STATE LINE														
TERRA HES #674 RM 249/35	.009	8.7	75	1 10	1 567	1 1					5 6.5			6/10
FLATIRONS PVG #683 RM 249/29	2.8		55		.5 57000	5								55/-
WINDSOR WWTP RM 249/23	.15			300										
MTN AGGR #362 RM 249/10	.28				.5	.5								1/-
GREELEY S&GR #359 RM 249/10	3.				.5	.5								1/-
FLATIRONS RWG #682 F1 249/10	2.		55		.5 22000	5								55/-
C. SUGAR-EATON#051 RM 249/6.9/7.0	2.6	8.1	81 72	1 300	1 27000	5 3200	113 34			1.2	60 2200			7/9
EATON WWTP RM 249/6.9/6.5	.2			1 120	.5	.5				5 712000				7/9
MONFORT #276 RM 249/6	.0004	7.4	70	1 4	1 4	1 3				ND	ND	ND		3/-
GREELEY WWTP RM 249/5.3	7.0			5 16400	3 31500	5 20600				4.2E3 5 >32E3				18/1
GW SUGAR-GRLY #052 RM 249/4.5	7.5	6.9	93 79	5 20600	3 66000	5 23800	363 580	3.5		160E3 5 50E3				18/1
CHEYENNE L&F #074 RM 243/60	.003	11.9 8.1	142 81	1 <1	1 14	1 1				NA	1 <.003			4/-
HUSKY OIL CO #068 RM 243/80	.35	9.		3 4815	3 28045	1 445	8	0		NA	5 121			12/4

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MAJOR POLLUTION SOURCES & EFFLUENT LOADS
SOUTH PLATTE R BASIN

	FLOW		TEMP				NH3-N	TOT	FEC TOT	OIL &	TOX	OTHER	
WASTE WATER SOURCE	MGD	PH	F	BOD5	TDS	TSS	ORG-N	P	BAC BAC	GREASE	MET		
S PLATTE R - HENDERSON TO STATE LINE													
UN PAC RR #113 RM 243/80	.30	10.5	79	.5 ND	.5 ND	.5			ND	.5 ND	ND		2/-
CHEYENNE WWTP RM 243/80	7.5	7.3		3 5000	12 22000	1 19000	ND	ND	ND				5/-
GW SUGAR-FT M #057 RM 196.2	10.8	8.7	111 92	5 11600	1 11000	3 6100	395 135	5.4	49 345	NA	NA		9/7
FT MORGAN WWTP RM 195.2	2.6			3 4120	3 60700	1 2200			.51E6 5 3.6E6				12/4
BRUSH WWTP RM 185.6	1.1			1 1290	1 6680	1 410			3.8E6 5 7.8E6				8/8
TERRA RES -- #316 RM 169	.022	9.4	76	NA	1 630	1 23			NA	0	NA		2/-
GW SUGAR-STLG #058 RM 150.4	6.6	8.1	93 79	3 4400	35 84000	3 4200	136 147		2E3 / 240E3	NA	NA		12/4
STERLING WWTP RM 148.6	2.5			3 6000	3 53000	3 5600			.17E6 5 1.2E6	NA	NA		14/2
SKELLY OIL CO #594 RM 138	.002	8.2	70	0	127	2			NA	ABS			
WESTERN GAS #597 RM 136	.002	7.0	80 70	<1	36	<1			0 500		1.1 CR		
GW SUGAR-OVID #059 RM 94.8	5.	6.8	88 77	18400	82100	5900	151 137	3.4	4.4E6 41E6				
JULESBURG RM 89.6	.2			80	2350	100			160000				

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SECTION F

Tactical Solutions

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

X. OVERALL BASIN SUMMARY

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - YRS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(1) Presently there does not exist an approved fully developed water quality management plan for the S. Platte River Basin or the Metro Denver Area for determining the allowable waste loadings for the River or to allocate the waste loads among present waste dischargers in the Basin.	(1a) Influence State to proceed on a priority basis to produce a fully developed S. Platte Basin Plan. (Planning Branch)	JAN 73	JUN 73	2B3149	1.0	0	0	0
	(1b) Provide direct assistance to State Planning Staff. (Planning Branch)	JAN 73	JUN 73	2B3145	1.0			
	(1c) Make DRCOG 3(c) Study material and S. Platte Basin Modeling material available for incorporation in fully developed plan. Planng Branch	JAN 73	Jun 73	2B3149	2.1			
	(1d) Review fully developed S. Platte basin plan. (Planning Branch, EIS Branch, Enforcement Branch, M&M Branch)	JUL 73	AUG 73	2B6117) 2B3149) 3B1123) 2B8162)		2.4 5.0 4.0 0.2		
(2) During worst conditions, water quality standards are violated throughout most of the Basin area under study for DO and fecal coliform parameters. The fundamental causes of these violations are low stream flows due to diversions for agricultural and other uses, inadequate treatment of municipal wastes, and inadequate treatment of organic wastes from several beet sugar mills owned by Great Western Corporation.	(2a) Monitor the S. Platte River Basin Modeling Study now underway under an EPA grant to determine water quality effects of point source discharges in basin. (Planning Branch)	JAN 72	JAN 73	2B1143	.5	0		
	(2b) Utilize Math Model to analyze water quality impacts in developing water quality management plans for S. Platte Basin. Effort will be performed in conjunction with Colorado Water Pollution Control Division. (Planning Branch)	JAN 73	JUN 73	2B1143	1.5			
	(2c) Continue to utilize Math Model in evaluating effectiveness of management efforts and updating water quality management plans. Effort will be performed in conjunction with Colorado Water Pollution Control Division. (Planning Branch)	JUL 73	JUN 76	2B1143		4.0	4.0	4.0
	(2d) Develop a cooperative long-term monitoring program with State for entire basin. (Surveillance & Analysis)	JUN 72	JAN 73	2B2147	4.0	0.5		

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

X. OVERALL BASIN SUMMARY - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - YRS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(3) Region VIII requested the Denver Field Investigation Center to make a compliance survey of the S. Platte Basin in 1971 to determine the status of water quality in the basin. This survey has been completed now and the results are available.	(3a) Publish the results of the DFIC study on the S. Platte for use by the regional planning commissions, the State and the EPA in preparing regional and basin plans. (Enforcement Branch)	JUN 72	NOV 72	3B1123	0.3			
	(3b) If actions are not taken on a local level, then enforcement actions will be taken. (Enforcement Branch)	DEC 72	JUN 72	3B1123	10.0	33.0	10.0	10.0
	(3c) Conduct Water Quality surveys as needed to enable use of enforc.actions against violators.	JAN 73	JUN 76	3B1123	22.0	22.0	10.0	10.0
(4). The DRCOG is the Metropolitan Denver Regional water quality planning agency. They have received an EPA 3(c) grant to produce a fully developed water quality management plan by July 1973. The study has now reached the end of Phase I.	(4a) Monitor and review the Denver Regional Council of Governments 3(c) water quality management study now underway for the Denver Metro area. (Planning Branch) (M&M Branch, EIS Branch, Enforcement Branch)	JUL 71 JUL 73	AUG 73 AUG 73	2B3149 2B8162 2B6117 3B1123	6.0 0.1 0.4	4.0 0.5 2.0 3.5		
	(4b) Publicize the public meeting to be held at the end of Phase I and get maximum involvement in reviewing Phase I from interested environmental groups. (Public Affairs)	OCT 72	NOV 72	5T2214	0.03* (9a)			
	(4c) Publicize results of 3(c) study at end of Phase II and get maximum involvement of interested environmental groups in review. (Public Affairs)	JUL 73	AUG 73	5T2214	.003	0.05* (9a)		
	(4d) Publicize S. Platte basin modeling efforts and basin plan.	FEB 73	SEP 73	5T2214	.03*	.05*(9a)		

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

X. OVERALL BASIN SUMMARY - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - YRS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(5) The Larimer-Weld County Planning Commission is responsible for water quality management planning in the two-county area. They are now working on their fully developed Water Quality Management Plans.	(5a) Support and assist in preparing the fully developed water quality management plan for their planning area. (Planning Branch, MAW Branch, Enforcement Branch)	JUN 72	JUN 73	3B3149 3B1123 2B8162	1.5 0.5 0.10			
	(5b) Review the fully developed water quality plans. (Planning Branch, EIS Branch, MAW Branch, Enforcement Branch)	JUL 73	AUG 73	2B3149 2B8162 2B6117 3B1123		5.0 0.2 2.4 0.5		
	(6a) Monitor development of interim plan revision including the sizing, siting and regionalization of MWWTP. (Planning Branch)	JUN 72	OCT 72	2B3149	0.2			
(6) An interim plan was prepared by DRCOG in July 1971 but this plan needs to be updated in light of new information now available.	(6b) Approve Interim Plan revision. (Planning Branch)	OCT 72	NOV 72	2B3149	2.0			
	(6c) Influence State to begin requiring conformance with the DRCOG plan when setting needs priorities, construction grant schedules, and plant requirements in terms of sizing and siting. (Planning Branch)	DEC 72	JUN 73	2B3149	0.05			
(7) Continued urbanization has led to a proliferation of fragmented water and sewer systems resulting in difficult if not impossible water management planning in the Denver Metro area. A HUD financed study by DRCOG will look at the problems and potential of providing consistent and economical service relating directly to the Lakewood suburban area and indirectly to other metro utilities.	(7) Work closely with HUD and DRCOG in getting the results of HUD study used in the preparation of the DRCOG Water Quality Management Plan (Planning Branch)	FEB 73	JUN 73	2B3149	0.05*			

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

X. OVERALL BASIN SUMMARY - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(8) The present water and sewerage rate structure in the Denver Metropolitan area does not discourage excessive water use and waste discharges which may contribute to overloadings to the system and the need for larger than necessary facilities. An EPA funded study (Utility Management Study) is now underway in conjunction with DRCOG to study the financing and costs of various wastewater collection, treatment, and disposal needs to the Metro Denver area.	(8a) Monitor ongoing EPA Utility Management Study (Planning Branch)	JUL 72	FEB 73	2B3149	1.3			
	(8b) Hold seminar on study for public (Planning Branch)	FEB 73	FEB 73	2B3149	0.2			
	(8c) Release EPA study results and get DRCOG to use them in implementing their Water Quality Management Plan. (Planning Branch)	FEB 73	DEC 73	2B3149	0.05	0.10		
	(8d) Get results of HUD-DRCOG study used in DRCOG Water Quality Management Plan.	FEB 73	JUN 73	2B3149	0.1			
Studies have shown that water use can be influenced by pricing and education: Approximately % of the Denver Water Board users now pay a flat rate.	(9a) Make press releases on basin problem and clean-up progress. (Public Affairs)	JUL 72	JUN 76	5T2214	0.10	0.10	0.10	0.10
(9) The rapid growth taking place in the front range portion of the basin has resulted in wastewater treatment plant facilities becoming overloaded before increased capacity can be added to treat the additional waste flows.								

X. OVERALL BASIN SUMMARY - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74-	FY 75	FY
(10) The stream classifications set for the S. Platte and tributaries in 1967 were based on the then current uses and quality. Today, public needs and desires for increased recreational use of the water resource represented by the S. Platte make the upgrading of its classification necessary.	(10a) Influence State to upgrade the water quality standards of the S. Platte that have been recognized as desirable for various recreational uses. (Planning Branch) (Program Planning)	MAR 72 JUN 72	OCT 72 NOV 72	2B1143 2B4153	0.2 0.10			
	(10b) Review the State reclassification of the S. Platte River. (Planning Branch)	NOV 72	MAR 73	2B1143	.3			
(11) It is important that wastewater treatment plants be operated for maximum efficiency so that full benefit is obtained from the tremendous public investment involved. O&M surveys of plants are an important tool in obtaining optimum use of plants and in insuring protection of this investment thru good maintenance of facilities. Such surveys can also be utilized effectively to identify problems due to industrial wastes, infiltration, overloading, etc. and can provide the means to call attention to and to initiate remedial measures. Initial O&M surveys are performed on the overall plant operation. Where additional technical assistance is required, a follow-up action is taken by the Technical Support Branch. Where needed, in-plant technical assistance can sometimes result in immediate water quality improvement.	(11a) Perform O&M Surveys at 20 plants in the South Platte River Basin during FY 1973. Promote improved State O&M programs. (MWW Branch, Manpower Development and Training Branch, Air and Water Programs Division)	1 SEP 72	30 JUN 73	2B8163 2B7160	6 1.5 (*169)			
	(11b) Provide in-plant technical assistance, (Technical Support Branch, Surveillance and Analysis Division)	1 SEP 72	30 JUN 73	2B8163	1.5			
	(11c) Perform O&M Surveys at 25 plants in S. Platte River Basin during FY 1974. Continue promotion of improved State and Local O&M Programs. (Municipal Waste Water Branch, Manpower Development and Training Branch, Air & Water Programs Division)	1 JUL 73	30 JUN 74	2B8163 2B7160		6.0 1.5 (*169)		
	(11d) Provide in-plant technical assistance to improve O&M. (Technical Support Branch, Surveillance & Analysis Division)	1 JUL 73	30 JUN 74	2B8163		1.5		

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

X. OVERALL BASIN SUMMARY - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - YRS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
Limited surveys conducted to date indicate that a substantial benefit can be obtained from O&M surveys and assistance.	(11e) Perform O&M Surveys at remaining major plants in S. Platte River Basin during FY 1975 and continue promotion of improved State and Local O&M programs. (Municipal Waste Water Branch, Manpower Development and Training Branch)	1 SEP 74	30 JUN 75	2B8163 2B7160			6.0 1.5(*169)	
12) The existing State minimum effluent standards are not satisfactory for reaching existing or proposed water quality standards in the basin. The present standards are based on percentage reduction of waste loads rather than on effluent strengths.	(11f) Provide in-plant technical assistance. (Technical Support Branch, Air and Water Programs Division)	1 JUL 74	30 JUN 75	2B8163			1.5	
The DRCOG 3(c) Study and S. Platte Basin Model and basin plan being developed now will be used to determine treatment plant requirements and location for proposed existing major municipal wastewater treatment plants in the S. Platte Basin.	(12a) Influence the State to adopt the proposed minimum effluent quality standards now being proposed for the State of Colorado. (Program Planning, Planning Branch)	SEP 72	DEC 72	2B1143 2B4153	0.3 0.10			
The upgrading and reclassification of the S. Platte will require all or nearly all existing facilities in the basin to be upgraded to meet the new stream standards & effluent stds. The proposed effluent stds in some cases will not be sufficient to enable stream stds. to be met where large MWTP are located on streams with low flows.								

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

X. OVERALL BASIN SUMMARY - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(13) The proposed effluent standards call for an effluent of 20 mg/l BOD_5 and 20 mg/l SS by 1978; and 30 mg/l BOD_5 and 30 mg/l SS effective immediately. The basin strategy will be to use the 1978 effluent standards for all wastewater treatment plants that do not meet the 30 mg/l BOD_5, 30 mg/l SS.	(13a) Evaluate, provide and monitor construction grants to meet new effluent standards or proven higher requirements for major waste water treatment plants listed in this Accomplishment Plan. (MWW Br, Plng Br, EIS Br, Construction Grants Administration)	OCT 72	JUL 76	2B8162 2B3149 2B6117 2B8316	3.9 2.5 0.7 2.0	6.0 5.0 0.7 2.0	6.0 5.0 0.7 2.0	4.0 5.0 0.7 1.0
	(13b) Approximately 100 other projects in the basin will have to be reviewed and grants made including interceptors and upgrading of existing small public facilities. (MWW Br, Plng Br, EIS Br, Cons. Grants Admin.)	OCT 72	OCT 76	2B8162 2B3149 2B6117 2B8316	5 2.5 3.0 2.0	8 5.0 3.0 2.0	20 5.0 3.0 2.5	20 5.0 3.0 1.5
As treatment facilities are brought on line in the basin instream water quality surveys will be necessary to determine if ambient water quality is responding as expected. The specific locations of the surveys will be determined after the S. Platte Basin Model & DRCOG 3(c) study are prepared.	(13c) Conduct in-stream studies of water quality to determine if specific abatement actions from industrial and municipal wastewater treatment plants are resulting in improved water quality. (Surveillance & Analysis)	JUL 72	JUL 76	2B2148		6.0	6.0	
At present the State of Colorado does not recognize the need for developing construction needs priorities based on the EPA priority basin accomplishment plan.	(14a) Condition State program assistance to gain State concurrence with essential items covered in South Platte Accomplishment Plan. (Program Planning)	SEP 72	Continuing	2B4153	1.0	1.1	0.5	0.5
(14) There will have to be close coordination between the EPA and the State of Colo. to insure that the State will place sufficient emphasis in their State program to accomplish the S. Platte Basin Plan. Specifically the Regional Administrator needs to convince the Governor to have an adequate W.Q. planning staff. Because of possible limited financial resources, it will be important that the State assign a high priority to construction grants in the South Platte Basin.	(14b) Influence State to modify or change construction grants priority system to reflect need for grants in the S. Platte. (Program Planning, MWW Branch)	SEP 72	SEP 73	2B4153 2B8162	.4 .05	.5 .05		
	(14c) Influence State to revise 1-5 year needs list to reflect Basin facility. (Program Planning)	DEC 72	DEC 73	2B4153	0.2	0.2	0.2	
	(14d) Influence State to adopt adequate State Permits Program. (Program Planning, Enforcement Division)	JUN 72	DEC 73	2B4153 3B1123	0.5 4.0	0.5		

X. OVERALL BASIN SUMMARY - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(15) The City of Denver Water Board has at present a water supply sufficient to serve the developing Denver Metro area only until 1985 ±. A recent bond proposal for planning and constructing an additional water diversion project to bring water from the western slope to extend Denver's water supply to the year 2000 was defeated.	(15a) Support the Denver Water Board and Metro Denver in their reuse application studies and their demonstration project applications. (Public Affairs, Planning Branch, Municipal Waste Water Branch, R&D)	OCT 72	June 76	2B3149 5T2214 2B8162 5T1214 2C5226	1.0 .1 .1 1.0 .10	1.1 .1 .1 1.0 .10	1.0 .1 .1 1.0 .10	1.0 .1 .1 1.0 .10
	(15b) See that DRCOG 3(c) plan or fully developed water quality management plan addresses the significance of the proposed project on the environment. (EIS)	OCT 72	JUN 73	2B3149 2B6117	0.3 .02	 .02		
The legal question of reuse of Denver's wastewater has now been resolved by the State Supreme Court which has ruled that the Denver Water Board may reuse all of its water diverted from the western slope.	(15c) Assure that a complete environmental assessment is made of the environmental effects of the consumptive use of water through reuse. (EIS) However actual amounts are not known nor are the legal implications of exchanging sewage effluent for allocated river water under specified conditions			2B6117	.02	.02		
*Metro Denver and the Denver Water Board have been exploring a 10 mgd. pilot project to reuse treated Metro wastewater for industrial uses. If this project succeeds, the Denver Water Board anticipates eventually reusing all of its Western Slope water. If this policy is carried out in the future, flows in the S. Platte River below Metro Denver will be reduced drastically from present levels in which case all other waste dischargers would be under pressure to upgrade their facilities. Reuse of this water, however, may mean that the Water Board will not have to construct additional water diversion projects.								

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

X. OVERALL BASIN SUMMARY - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - YRS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(16) The EPA has undertaken the responsibility of training wastewater plant operators as required in the FWQA and the MDTA. To meet this goal, the actual training is farmed out with certain contractual responsibilities assumed by the EPA.	(16a) Monitor 5(g)(1) training courses for wastewater treatment operators in the Greeley and Fort Collins areas.	SEP 72	NOV 72	2B7158	0.5			
	(16b) Monitor 5(g)(1) training course for wastewater treatment plant operators at the Denver North Side Plant.	JAN 73	MAR 73	2B7158	0.5			
	(16c) Monitor Institutional Training Program at Denver Community College.	JUN 72	JUN 73	2B7158	0.5	0.5	0.5	0.5
	(16d) Continue training support.	JUN 72	JUN 76	2B7158	0.5	2.0	2.0	2.0
	(16e) Coordinate field study training program for wastewater treatment plant operators.	JUN 72	JUN 76	2B7158	0.2	0.2	0.2	0.2
	(16f) Provide assistance to the States for developing manpower planning functions in employment and training.	JUN 72	JUN 76	2B7161	1.0	2.0	2.0	2.0
	(16g) Survey wastewater treatment plants with O&M Survey Team to determine plant staff training needs.	JUN 72	JUN 76	2B7160	1.5	1.5	1.5	1.5
(17) Oil spills are a constant problem on the S. Platte and their occurrence has resulted in degradation of water quality. A control program for oil spills and hazardous materials has been developed.	(17a) Investigate all primary sources as spill accidents occur. (Surveillance & Analysis)	JUL 72	JUN 76	2B1144	1.5	1.5	1.5	1.5
	(17b) Coordinate inventory of source location prepared by Denver Metro Mutual Aid Group. (Surveillance & Analysis)	JUL 72	JUL 74	2B1144	0.5	0.5		

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

X. OVERALL BASIN SUMMARY - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(18) Major industrial dischargers in this area contribute significant quantities of pollutants to the S. Platte and its tributaries.	(18a) Obtain voluntary letters of commitment* from major industrial waste dischargers in basin (Permits Branch)	MAR 72	DEC 72	3B2124	45	-	-	-
Although several of the major sources are located, considerable distances apart, the total water quality benefits relative to regional resources required to obtain clean-up are substantial. Limiting discharges from these sources provides an early and identifiable water quality improvement in each case with certain cases bringing their reach up to standards.	(18b) Prove applicability of [illegible] to industries discharging to municipal wastewater treatment plants that are not adequately treated. (Enforcement Branch)	OCT 72	FEB 73	3B1123	5			
	(18c) Following the processing of the major dischargers in the basin, improved effluent quality will be sought by either issuance of permits (assuming adoption of the necessary water quality legislation) or by voluntary commitments. (Permits Branch)	JAN 73	JAN 75	3B2124	2.0	50	50	
Pending adoption of water quality legislation and the initiation of a permit program, the Permits Branch will seek voluntary industrial commitments to abate pollution.	(18d) Conduct sampling program of various industrial waste dischargers to insure compliance of discharger with voluntary reduction commitments. (Surveillance & Analysis)	MAY 72	Continuous	3B2124	22	20	20	20
Voluntary letters of commitment from major dischargers have been received or will be received shortly by the EPA.								
Discharge quality will meet Water Quality Standards by the use of Best Practicable Treatment (BPT) or Best Available Treatment (BAT), where necessary.								

*These letters of commitment will be converted immediately to permit actions as soon as guidelines are available.

X. OVERALL BASIN SUMMARY - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - YRS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(19) Most of the Federal facilities in the S. Platte are well operated but some could possibly be connected to municipal systems for better treatment such as the Buckley Air National Guard plant, Fitzsimmons Hospital, Estes Park Bureau of Reclamation plant, and several Rocky Mountain National Park campground facilities.	(19a) Insure adequate control at Federal facilities (Federal Activities)	MAR 72	Continuous	2B6116	0.5	0.5	0.5	0.5
	(19b) Work toward getting Federal facilities connected to municipal facilities where possible. Present Water Quality Management studies in the Metropolitan Denver area and the Estes Park Area are studying the possibilities of connecting these facilities and will have recommended actions available by June 73.	OCT 72	JUN 74	2B6116	0.5	0.5	0.3	0.3
(20) South Platte River Basin Accomplishment plan must be used, and reported on to be effective tool for Regional use.	(20) Monitor, implement, report and update Basin accomplishment plan for coordinated agency effort.	OCT 72	JUN 76	2B3149	2.0	2.5	2.5	2.5

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

I. HEADWATERS TO BOWLES AVENUE

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - YRS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(1) Present DO standard is violated. For proposed reclassification to B3 (Body Contact Recreation), fecal coliform would also be violated. Basic need in this reach is to protect the generally high quality waters for recreation purposes at Chatfield Dam and Reservoir (to be in operation during 1975) and for the Littleton Floodplain Park.	(1a) Update efforts to obtain schedule for establishing B_3 Classification. (Planning Branch)	JUN 72	NOV 72	2B1143	0.05	*(10a)		
(2a) Evidence indicates a high nutrient concentration which would cause eutrophication in Chatfield Reservoir. Especially in the Plum Creek arm where 100% of the present organic load is discharged.	(2a) Investigate nutrient removal needs at all sources in reach. (Planning Branch)	SEP 72	DEC 73	2B1143	0.2	0.5		
Major sources requiring No Discharge Policy. (1) Castle Rock (2) E. I. Dupont (Discharges high BOD_5 and Total -N). (3) Martin Marietta (Discharge contains high TDS and toxic metals).	(2b) Investigate use of No Discharge Policy (land disposal) for all proposed waste discharges generated in this reach, i.e., maximum protection of high quality waters. (Planning Branch)	SEP 72	JAN 75	2B3149	1.0	1.0		

*Included in Basin Summary.

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

I. HEADWATERS TO BOWLES AVENUE - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - YRS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(3) Castle Rock Wastewater Treatment Plant is the major municipal wastewater treatment plant discharging to S. Platte River Basin in this reach.	(3a) Conduct pre-application and pre-construction conference for No Discharge to stream. (MWWD Section, Planning Branch)	SEP 73	MAR 74	283149 288162		0.05 0.5	*(13a)	
	(3b) Make construction grant. (MWWD Section)	JUL 74	DEC 75	288162		*(13a)	0.2	0.2
(4) E. I. Dupont discharges high BOD_5 and Total -N.	(4) Obtain commitment for improved discharge for the following parameters: Flow, pH, BOD_5, TSS and Total -N. No discharge will be proposed for 1975 due to the construction of Chatfield Dam. (Permits Branch)	JUN 72	NOV 72	382124	2.0			
(5) Martin Marietta discharges high TDS and toxic metals.	(5) Obtain commitment for improved discharge quality to meet effluent requirements. No discharge may be necessary by 1975 due to construction of Chatfield DAm. (Permits Branch)	JUN 72	NOV 72	382124	2.0			
(6) The TRI-County Health Dept. has adopted higher effluent standards for the S. Platte above Littleton and for all tributaries to the S. Platte. The standards require that all new waste discharges be no more than 5 mg/l BOD_5 and 5 mg/l SS while existing facilities must meet these standards by 1975. The TRI-County Health Dept. is advocating No Discharge if possible in this area and has been supporting land disposal of WWTP effluent.	(6) Support TRI-County Health Department Standards for this area.	OCT 72	JUN 76	283149	.02	.02	.02	.02

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*Included in Basin Summary.

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

II. BOWLES AVENUE TO EXPOSITION (ALAMEDA WQ STATION)

SITUATION ANALYSIS		RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - [illegible] - [illegible])			
			INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
This reach is classified for cold water fishery. Basic standards being violated for DO and fecal coliform. The significant problem areas are:									
(1) Bear Creek	(1a)	Develop strategy for Olympics. (EIS Branch)	JUN 72	FEB 76	2B6117	0.4	1.0	0.4	0.4
Bear Creek in mountain development area of Jefferson County. Pressures of 1976 Winter Olympics and home developers will cause impact on high quality waters. These waters will be impounded behind Mt. Carbon Dam which is scheduled for completion about 1976. From this Dam upstream, high degrees of waste control will be required to protect recreation use.	(1b)	Maintain close review of Mt. Carbon Dam Project through EIS and Water Resource reviews. (Planning Branch)	OCT 72	JUN 75	2B3149	[illegible]	.5		
	(1c)	Insure that the DRCOG Interim Water Quality Management Plan addresses problem of mountainous areas. (Planning Branch)	SEP 72	JAN 73	2B3149	0.10	*(6a)		
From Mt. Carbon Dam to confluence with main stem Bear Creek flood plain is sesignated as green belt open space and is classified as a warm water fishery. DO and Fecal Coliform Standards are now violated. Flow becomes so low as not to support a fishery. Also, stream channelization is taking place and may not be compatible with designated and desired uses. Basic needs are for upgrading disinfection at wastewater treatment plant's regionalization and/or control of mountain development, future needs for nutrient removal, and control of the flood plain.		*Included in Basin Summary.							

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

II BOWLES AVE. TO EXPOSITION (ALAMEDA MD STATION) - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS -BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - YRS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(2) The present Evergreen Wastewater Treatment Plant is grossly overloaded. There are three Municipal Wastewater Treatment Plants within five miles of the present site and there are proposals of expansions at all three plants. The question of regionalization in this area must be adequately studied.	(2a) Review and process Evergreen Sanitation Dist. grant request and insure that the proposed project will not result in degradation of Bear Creek water quality and that possible regionalization potential in area is fully studied. (MWW Branch, Planning Branch)	JUN 72	JAN 73	2B3149 2B8162	0.05 0.5	*(13a)		
	(2b) Evaluate and reaffirm regional site location. (Planning Branch)	OCT 72	DEC 72	2B3149	1.5			
	(2c) Make construction grant. (MWWD)	JUL 73	JUN 74	2B8162		0.3	*(13a)	
(3) Littleton-Englewood These WWTP's serve high growth area in the Southwest portion of the Denver SMSA. Basic need is for regionalization and improved treatment and O&M. Interim water quality plan designates Englewood as regional site. Probable need for interim measure since Littleton is now overloaded.	(3a) Hold preapplication meeting with Littleton and Englewood concerning Interceptor to take excess Littleton flows to expanded Englewood WWTP. (Planning, MWWD)	JAN 73	MAR 73	2B3149 2B8162	0.1			
	(3b) Make construction grant for interceptor between Littleton and Englewood, Colorado. (MWW Branch)	APR 73	JUN 73	2B8162	0.3		*(13a)	
The present Englewood WWTP is being expanded now under an EPA construction grant.	(3c) Conduct O&M survey at new Englewood Wastewater Treatment Plant approximately 6 months after completion. (MWW Branch, Manpower Development & Training Branch)	MAY 73	JUN 73	2B8163 2B7160	0.33 0.08	*(11a) "		
The City Councils of Englewood and Littleton have begun negotiations for making the Englewood plant the regional WWTP.	(3d) Make Construction Grant for regional wastewater treatment facility at Englewood. (MWWD)	JUL 73	DEC 73	2B8162		0.5		

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*Included in Basin Summary.

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

II. BOWLES AVE. TO EXPOSITION (ALAMEDA WQ STATION) - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - YRS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(4) Gates Rubber Company Discharges of Heat, Oil and Grease, and toxics need high degree of control since discharge is to coldwater fishery.	(4) Obtain a commitment for limits of a high quality effluent. (Enforcement)	AUG 72	DEC 72	3B2124	2.0	--	--	--
(5) Public Service Company Arapahoe Station discharges effluent with high solids.	(5) Obtain a commitment for the discharge of a high quality effluent. (Enforcement)	AUG 72	DEC 72	3B2124	2.0	--	--	--
(6) Other minor industrial dischargers have submitted RAPP applications.	(6) Re-evaluate other permits in reach as related to protecting fishery and possible use of No Discharge. (Enforcement)	OCT 72	JUN 73	3B1123	0.10*	0.10*	0.10*	--

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

III. EXPOSITION TO YORK

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
This reach classified as warm water fishery. Standards for DO & fecal coliform are being violated. Significant problem areas are.								
(1) Cherry Creek Illegal connections to Storm Sewers discharging into Cherry Creek (i.e., car washes, etc.).	(1a) Develop program to assist City of Denver in determining and controlling sources. (Planning Branch, S&A Field Support)	OCT 72 OCT 72	JUN 73 JUN 73	2B3149 2B5154	0.2 2.0	 -	- -	- -
Need for No Discharge or AWT of Discharges to Cherry Creek upstream of Cherry Creek Dam.	(1b) Determine waste control measures for area upstream from Cherry Creek Dam and impact DRCOG Water Quality Management Plan. See Headwaters to Bowles tasks.	See Headwaters to Bowles - No Discharge.						
(2) South Lakewood Presently overloaded. Although plant is now being expanded, new effluent standards will not be met by expanded plant.	(2a) Investigate in more detail/possible connection to Metro Denver and develop recommendations (Planning Branch). in connection with 3(c) study	JAN 73	JUN 73	2B3149	0.05		-	-
	(2b) Monitor progress of construction grant. (MWW Branch)	JAN 73	JUN 73	2B8162	0.2	*(13a)		
(3) The City of Denver Sewer System has several deficiencies where combined sewer overflows are bypassed to city storm sewers. Most of these combined sewers are in the older downtown section of the city which results in overflows to the S. Platte during heavy rainfall. The city, through its urban renewal program, is separating the combined sewers when rebuilding these downtown sections.	(3) Work with the City to get its combined sewer system separated to avoid overflows to S. Platte. (MWWD)	JUL 72	JUN 76	2B8162	0.1	0.1	0.1	0.1*(13a)

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*Included in Basin Summary.

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

III. EXPOSITION TO YORK - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - YRS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(3) Continued The City has also passed an 8-million dollar bond issue for repairs to existing interceptors and trunk sewers which are experiencing infiltration and other structural problems.								
(4a) The City of Denver sewage collection system has at least two major deficiencies where interceptor capacities are not sufficient to carry the sewage flow. (1) An interceptor and siphon at York Street in the N.E. section of the City overflows to a storm sewer resulting in direct discharge to the Burlington Ditch. The City has held a preapplication meeting with the EPA and is preparing final plans and specs to relieve this problem with a new lift station and force main.	(4a) Expedite City's construction grant application process for the N. E. Capital Improvement Project which contains this construction element.	JAN 73	JAN 74	288162	0.2	0.1	*(13a)	-
(4b) A City sewer line at 47th Street and Broadway is presently not adequate to carry all the sewage flow and overflows are carried by an existing storm sewer to the S. Platte River. A Metro Denver project, the S. Platte River Interceptor II, currently under construction, will pick up this overflow and bring it to the Denver Northside WWTP. At the present time, the project is complete except for the lift station which delivers the sewage to the treatment plant. The pumps for this station are due for delivery in December 1972.	(4b) Monitor construction grant.	71	JAN 72	288162	0.2	*(13a)		

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

III. EXPOSITION TO YORK - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - YRS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(5a) The City of Denver Northside plant is currently not able to give primary treatment to peak flows that exceed 130 mgd. Excess sewage is now bypassed directly to the S. Platte River at this time.	(5a) Develop interim measures if possible that would enable the Denver Northside plant to treat the flows in excess of 130 mgd, such as flow equalization basins, or provide a bypass which would send the excess raw sewage flows to the Metro plant in the existing interceptor which carries Denver Northside primary treated sewage. (MWWD-Planning-Enforcement Branches)	OCT 72	MAR 73	2B8162 2B3149 3B1123	0.2 0.1		*(4a)	—
(5b) Metro Denver has a grant application for an interceptor to take this excess flow to the existing Metro facility, but Metro plans to wait on putting in this interceptor until the pending legislation has passed.								
	(5c) Insure that Denver Metro has its plans and specifications prepared for the S. Platte Interceptor #2 ready so that a grant can be made as soon as the Federal legislation has passed.	OCT 72	JAN 73	2B8162	0.3	*13A		
	(5d) Make constrauction grant. (MWW Branch)	FEB 73	JUN 74	2B8162	0.2	0.2	*(13a)	

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

III. EXPOSITION TO YORK - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - YRS)			
		INITIATION	COMPLETION		FY 73	FY 74-	FY 75	FY 76
(6) American Smelting and Refining is discharging toxic metals.	(6) Obtain a commitment to meet Water Quality Standards. (Permits Branch)	OCT 72	JAN 73	2B2124	2.0			
(7) Several industries are disposing of their toxic industrial wastes in the City of Denver Sanitary Landfill at Lowry Bombing Range. This can result in leakage of these materials to streams through operations at the landfill.	(7a) Monitor 3(c) grant for DRCOG to insure that this problem is studied and possibility of having treatment plant investigated. (Planning Branch)	SEP 72	JUN 73	2B3149	1.0			
(8) The Burlington Ditch Company at times diverts the entire South Platte River upstream from the Denver Metro #1, WWTP discharge.	(7b) Furnish information to Categorical Programs. (Planning Branch)	JUN 73	JAN 74	2B3149	0.02	0.02		
This has two adverse results:								
(a) Stream is dry and does not support desirable life.	(8a) Develop in cooperation with State and other Federal agencies the required minimum streamflow for maintenance of fish and other aquatic life. (Surveillance & Analysis)	JUL 73	OCT 73	5B5154	-	3.0	-	-
(b) The South Platte River as reconstituted is entirely made up of Denver Metro #1 effluent.	(8b) Investigate water exchange between Denver Metro #1 and Burlington Ditch Company. (Planning Branch)	OCT 72	JUN 73	2B3149	0.2	0.2	-	-

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*Included in Basin Summary.

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

IV. YORK STREET TO HENDERSON

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
This Reach is classified (C,D$_1$) for industrial and irrigated agriculture. DO standards are violated. Fecal Coliform standards in Clear Creek are violated. The EPA and State are working to upgrade this reach to B$_1$, warm water fishery.	(0) Investigate in detail with appropriate State and Federal agencies the upgrading of classification to warm water fishery (high priority because design of Denver Metro #1 is dependent on this criteria). (Planning Branch)	OCT 72	JAN 73	2B3149	0.4			
Significant problem areas are: (1) Several priority industrial discharges are congregated in the vicinity of Denver Metro #1 and Sand Creek.	(1a) Investigate consolidation of three rendering plant wastes through DRCOG 3(c) Study. (Planning Branch, Permits Branch)	JAN 73	JUN 73	2B3149 3B2124	0.02 0.1	*(4a) "		
	(1b) Investigate consolidation of all industrial waste discharges in area, through DRCOG 3(c) Study. (Planning Branch)	JAN 73	JUN 73	2B3149	0.02	*(4a)		
	(1c) Develop permits of commitment letters for all dischargers in area. (Permits Branch)	JAN 73	JAN 75	3B2124		5	5	*(18b)
(2) Denver Metropolitan Sanitary District #1 The Denver Metro has the largest wastewater treatment facility in the S. Platte Basin. The present Metro District treats the raw sewage of numerous municipalities and sanitary districts as well as the primary effluent of the City of Denver Northside plant.	(1d) Make Press releases on Reclassification of S.Platte from York St. to Nebraska.(Pub.Affairs)	NOV 72	JAN 73	5T2214	0.05			
	(2a) Review Metro Denver Service contracts for deficiencies and recommend changes to Metro Denver regarding equitable cost sharing and related system management (Regional Counsel, Planning Branch)	OCT 72	JAN 73	2B3149 3R1127	0.05 0.09			

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

IV. YORK STREET TO HENDERSON

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 7
(2a) There appears to be a need for some kind of better coordination between these contributors and the Denver Metro District and the contractual arrangements now in effect.								
(2b) The treatment efficiency of the plant does not meet the present state treatment requirements of 80 % BOD_5 removal at all times. At the present loads and flows the facility cannot meet the proposed state effluent standards or the proposed stream reclassifcation. With the increase in growth in the area and the increased sewage flows to Metro Denver plant expansion is needed now. A Regional EPA study of the effluent requirements for Denver Metro to meet the existing stream standards in the S. Platte are 10-15 mg/l BOD_5. To meet the proposed B2 stream standard, the effluent must be less than 10 mg/l BOD_5.	(2b)1 Insure that an engineering study prepared for the Denver Metro facility includes analysis of the Denver Northside plant so that both can be examined for their total system needs. (MWW Branch, Planning Branch)	OCT 72	JUN 73	2B8162 2B3149	0.05 1.0			
	(2b)2 Meet with Denver Metro officials and get a firm commitment for the Metro effluent from the planned expansion to meet whatever effluent requirements are necessary to maintain the proposed stream standards. (MWWD-Enforcement-Planning Branch)	OCT 72	JUN 73	2B8162 2B3149 3B1123 3B1143	0.5 1.0 4.0 1.2			
	(2b)3 Make construction grant. (MWW Branch)	MARCH 73	JUN 73	2B8162	0.5	0.5	0.5	0.5
(2c) The present operation of the present Denver Metro plant appears to be such as to minimize operating costs to the district at the expense of the effluent quality. Metro is presently using 4 aeration basins as aerobic sludge digestors to minimize sluge treatment and disposal costs. This results in an activated sludge of poor settleability and hence the secondary clarifiers do not operate as efficiently as would otherwise be possible.	(2c)1 Meet with Denver Metro officials and require that Metro operate their present plant to maximize effluent quality now as a condition for any construction grant to expand the facility. (MWWD, Enforcement, Planning, O&M)	OCT 72	JAN 73	2B8162 2B3149 3B1123 2B8163	0.5 (*[illegible]a) 1.0 4.0 0.05			

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TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

IV. YORK STREET TO HENDERSON

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 7
Also it appears that if the secondary clarifiers had remedial work performed on them that the present problem of solids washout could be considerably alleviated.								

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

IV. YORK STREET TO HENDERSON - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(3a) Clear Creek This tributary is a major metropolitan waterway (similar to Bear Creek) which has been identified as prime green belt open space. Two basic needs are improved disinfection at present wastewater treatment plant facilities and decision for regionalization of existing facilities with Denver Metro #1	(3a) Ensure regionalization questions for Clear Creek are satisfied in DRCOG fully developed water quality management plan. (Planning Branch)	OCT 72	JUN 73	2B3149	0.05	*(4a)		
	(3b) Work with MWWTP operators to improve disinfection practices (O&M)	JUL 72	JUN 73	2B8163	0.20	*(10a)		
(3b) Golden will be connecting to Metro Denver, since the Coors wastewater treatment plant can no longer treat Golden's wastewater flow.	(3b) Ensure that Golden connection to Metro will be consistent with Clear Creek regionalization plans. (Planning Branch)	OCT 72	JAN 73	2B3149	0.05	*(6a)		
(3c) In broader context, there is need for land use plan for the floodplain. This area will be focal point for recreation and the need is for adequate stream flow (which doesn't exist) and related water quality. Water quality problems relate to Water Rights, Mine drainage, sand and gravel operations, and garbage dumps located beside the creek.	(3c)1 Make press releases. (Public Affairs Office)	OCT 72	JUN 76	5T2215	0.02	0.02	0.02	0.02
	(3c)2 Make contacts with political and other power structures in Clear Creek Basin to get maximum cooperation between EPA and local officials. (Planning Branch)	OCT 72	JAN 74	2B3149	0.05	0.05	0.05	
	(3c)3 Get voluntary commitments for sand and gravel operations to meet effluent standards. (Permits Branch)	JAN 73	JAN 75	3B2124	1.0	1.0	*(18c)	
(4) Public Service Company, Cherokee Station, discharge.	(4) Obtain a commitment from Public Service Company to meet effluent limitations and water quality standards. (Permits Branch)	1 AUG 72	1 OCT 72	3B2124	2.0			

*Included in Basin Summary.

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(5) Continental Oil Company discharge.	(5) Negotiate for a commitment limiting discharge of BOD_5, TSS, NH_3 and oil and grease.	1 AUG 72	1 DEC 72	3B2124	2.0			
(6) American Metals Climax Discharge.	(6) Commitment from this industry must limit discharge of toxic metals to BPT values. Limits on TSS and NH_3 are also necessary to meet water quality standards. (Enforcement Branch)	1 AUG 72	1 OCT 72	3B2124	2.0			
(7) Adolph Coors Company has a large discharge volume high in BOD_5 and solids.	(7) They have commited themselves to a reduction in pollutant loading to Clear Creek. Specific details will be spelled out in a letter due September 1972. (Permits Branch)	1 JUL 72	31 DEC 72	3B2124	2.0			
(8) Cotter Corporation's discharge to Ralston Company is high in radioactivity.	(8) A treatment facility is being constructed. A commitment to effluent quality will be negotiated. If radiation levels are not decreased in the near future, enforcement action will be taken. (Permits Branch)	1 AUG 72	1 DEC 72	3B2124	0.5	*(18c)		
(9) The S. Adams WWTP is presently meeting treatment requirements but with proposed effluent and stream classification changes it will no longer be satisfactory.	(9a) Hold preconstruction and preapplication meeting for improvements to existing facility. (MWW Branch, Planning Branch)	OCT 73	MAR 74	2B8162 2B3149		0.5 0.05		
	(9b) Make construction grant. (MWW Branch)	JUL 74	JUN 75	2B8162			0.2	

*Included in Basin Summary.

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

V. HENDERSON TO STATE LINE (Not including Cache La Poudre River)

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(0) This reach is classified C, D_1 for industrial and irrigated agriculture. DO standards are violated on main stem and tributaries thereto. Major waste discharge problems include residual influence of Denver Metro #1, Beet Sugar Mills, Feedlot runoff, meat packing, and diffuse source runoff. Major feed lots upstream from Kersey.	(0) Investigate in detail with appropriate State and Federal agencies the upgrading of classification to warm water fishery. (High priority because design of Denver Metro #1 is dependent on this criteria). (Planning Branch)	OCT 72	JAN 73	2B3143	0.1	*(10a)		
	(0a) Make press releases on Air and Water Div. upgrading use classifications of water quality standards. (Public Affairs)	OCT 72	JAN 73	5T2215	0.05			
(1) The major industrial dischargers in this reach are Great Western Sugar Mills as mills contribute a large BOD, TSS and fecal coliform loading.	(1) Negotiations with Great Western have lead to recycling of flume water in all of their plants. Pollutent loads should be decreased by 80% this campaign (72-73) and an additional percentage next campagin (73-74). Commitments for each plant have been made by the company and will be enforced if necessary. (Permits Branch)	1 MAR 72	1 MAR 73	3B2124	15			
(2) The Larimer-Weld Planning Commission is responsible for Water Quality Management Planning for two counties in this area and will require close EPA help in preparing their fully developed Water Quality Management Plan.	(2) Assist the region in utilizing S. Platte Basin Model for determining allowable waste loadings to streams in area and from existing and proposed point sources. (Planning Branch)	JAN 73	JUL 73	2B3149 2B1143	1.0 0.1	0.5 0.1		

*Included in Basin Summary

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

V. HENDERSON TO STATE LINE (Not including Cache La Poudre River) - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(3) Brighton Wastewater Treatment Plant is overloaded and not meeting treatment standards. A construction grant is now underway but the expanded facility will not meet proposed effluent standards.	(3a) Monitor Construction Grant now underway. (MWW Branch)	APR 73	DEC 73	2B8162	0.1	0.1	*(13a)	-
	(3b) Through basin plan, get firm commitment for Brighton's allowable waste discharge and have construction grant processed to upgrade plant to meet effluent discharge standards and hold preapplication & preconstruction grant conf. (Planning Branch and MWWD)	SEP 73	DEC 73	2B3149 2B8162		0.05 0.5	*(13a)	
	(3c) Make construction grant. (MWW Branch)	MAR 74	JUN 75	2B8162		0.10	0.20	*(13a)
	(3d) Conduct O&M survey of new Brighton wastewater treatment plant approximately six months after completion. (MWW Branch, M&D Branch)	APR 73	JUN 73	2B8163 2B7160	.33 .08	*(11a) *(11a)		
(4) Big Dry Creek Presently, Big Dry Creek does not have any Water Quality Standards.	(4a) Get the State to classify Big Dry Creek since it has a high recreation potential. (Planning Branch)	OCT 72	DEC 72	2B3143	0.1	*(10a)	-	-
(5) USAEC Dow Chemical Plant. Discharge Plant has a history of accidents related to radioactivity.	(5) Negotiations in progress. Commitment to acceptable discharge quality must be made. (Permits Branch)	1 AUG 72	1 NOV 72	3B2124	2.0	-	-	-

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

V. HENDERSON TO STATE LINE (Not including Cache La Poudre River) - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(6) Broomfield and Westminster are in an area experiencing rapid growth and will either expand facilities or tie into a regional facility. Presently, the facilities are operating satisfactorily except for Broomfield's disinfection.	(6a) Insure that DRCOG 3(c) Study looks at regionalization potential for future needs in this area. (Planning Branch)	JAN 73	JUN 73	2B3149	0.05	*(4a)		-
	(6b) Influence State to make O&M Study of Broomfield plant to get better disinfection and determine if the facility has adequate disinfection capacity. (MWW Branch,	SEP 72	JUN 73	2B8163	.33	*(11e)		
(7) Ft. Lupton Wastewater Treatment Plant will need to have improved facilities to meet State proposed effluent standards.	(7a) Hold pre-application and preconstruction conference. (MWW Branch, Planning Branch)	JUL 74	JAN 75	2B3149 2B8162	- -	- -	0.05 0.5	*(13a)
	(7b) Make construction grant. (MWW Branch)	JUL 75	JUN 76	2B8162	-		.2	.2 *(13a)
(8) St. Vrain Creek								
(a) Coal Creek has several small wastewater treatment plants that require improved O&M, disinfection and expansion of or regionalization of facilities. Water quality in Boulder Creek is affected by these overloaded facilities.	(8a) Insure DRCOG Water Quality Management Plan and Basin Plan to study waste treatment needs and regionalization needs. (Planning Branch)	JAN 73	OCT 73	2B3149	0.05	0.02	-	*(4a)

*Included in Basin Summary.

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

V. HENDERSON TO STATE LINE (Not including Cache La Poudre River) - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(8) (b) Boulder wastewater treatment plants are the largest point source on Boulder Creek; neither facility meets the proposed State effluent standards.	(8b) Hold a pre-application and pre-construction conference for upgrading the treatment facilities to meet the proposed State effluent standards. (MWW Branch)	MAR 73	JUN 73	2B3149 2B8162	0.06 0.5	*(13a)		-
	(8b)1 Make construction grant. (MWWD)	JAN 74	JUN 75	2B8162	-	.5	.5	*(13a) .5
(8) (c) Allied Chemical Corporation discharges toxic metals and radioactivity to St. Vrain Creek.	(8c) A commitment has been requested from Allied Chemical Company. (Permits Branch)	SEP 72	NOV 72	3B2124	2.0			
(8) (d) Public Service Company, St. Vrain and Valmont Plants. Nuclear powered St. Vrain Plant will be a major power source.	(8d1) Investigate No Discharge. (Enforcement Branch)	JUN 72	JUN 73	3B1123	0.3			
	(8d2) Voluntary commitments requested to meet water quality standards. (Permits Branch)	JUL 72	OCT 72	3B2124	2.0			
(8) (e) Longmont wastewater treatment plant is discharging inadequately treated wastes resulting in water quality of the St. Vrain River being degraded. An EPA O&M survey has determined that the plant as designed and built cannot operate to meet present 80% BOD_5 removals.	(8e1) Get disinfection equipment operating properly at plant through enforcement notice. (Enforcement Branch)	OCT 72	JAN 73	3B1123	1.0			
	(8e2) Hold a preapplication and preconstruction conference for improvements to the present plant. (MWW Branch, Planning Branch)	OCT 72	JUN 73	2B3149 2B8162	0.05 0.5	*(13a)		
	(8e3) Make Construction Grant	JAN 74	JUN 75	2B8162	-	.5	.5	*(13a)

*Included in Basin Summary.

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

V. HENDERSON TO STATE LINE (Not including Cache La Poudre River) - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY [illegible]	FY 74-	FY 75	FY 76
(9) Big Thompson River The headwaters of the Big Thompson River in Estes Park are of high quality but are under the stress of numerous small wastewater treatment plants which are attempting to treat the wastes of the burgeoning recreational growth in the area.	(9) Conduct water quality study of Lake Estes through National Lake Eutrophication Study. (Surveillance and Analysis)	JUN 74	OCT 74	2B6154		1.0	3.0	-
(a) The Upper Thompson Sanitation District is proposing to collect and treat all the projected wastes in the area to preserve the high water quality now found.	(9a1) Review Environmental Assessment of the proposed Upper Thompson Sanitation District Plan (EIS) and prepare Environmental Impact Statement. (Environmental Evaluation Section)	OCT 72	DEC 72	2B6117	2.4			
The problem of regionalization with the existing Estes Park Sanitation District needs to be resolved in an interim plan addendum for the basin.	(9a2) Monitor development of Interim Plan addendum for Basin to insure regionalization problem of the two Sanitation Districts and Federal National Park facilities are resolved. (Planning Branch)	SEP 72	JAN 73	2B3149	0.15			
	(9a3) Make a grant to the Upper Thompson Sanitation District if their proposed project is approved and will not result in degradation of water quality in the Big Thompson River. (MWW Branch)	JAN 73	JUN 74	2B8162	0.2	0.2		

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

V. HENDERSON TO STATE LINE (Not including Cache La Poudre River) - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(10) Crow Creek is not classified in either Wyoming or Colorado.	(10) Work with States to get stream classified to protect downstream water uses. (Planning Branch)	OCT 72	JUN 73	2B1143	1.5	-	-	-
(10a) Husky Oil (Cheyenne) discharge is high in several pollutants to Crow Creek.	(10a) Commitment has been made to reduce BOD_5, NH_3, TSS, Oil and Grease and phenols in their discharge to a BPT level.	1 JUL 72	1 AUG 72	3B2124	2.0	-	-	-
(10b) The Cheyenne Municipal Wastewater Treatment Plant is overloaded and discharges heavy loads of BOD_5 and SS to Crow Creek.	(10b) Hold pre-application and pre-construction grant conference. (MWW Branch, Planning Branch)	JUL 73	JAN 74	2B3149 2B8162		0.05 0.50	*(13a)	-
	(10c) Make construction grant. (MWW Branch)	JUL 74	JUN 76	2B8162	-	-	0.2	0.2
(11) Ft. Morgan Wastewater Treatment Plant is presently tremenously overloaded due to high organic loadings from meat packing wastes, although at times it meets State treatment efficiency requirements for BOD removal. The plant has disinfection equipment but does not operate it constantly.	(11a) Conduct an operators training program for the operating personnel. (Manpower Development and Training Branch)	JAN 73	JAN 74	2B7158	0.02	-	-	-
	(11b) Influence the State to conduct frequent manpower visits at the plant to insure that the disinfection equipment is always operating. (O&M)	JAN 73	JUN 73	2B8163	0.02	-	-	-
	(11c) Influence the City to have the meat packing waste discharger to pretreat his waste or to pay for additional plant capacity to meet proposed stream and effluent standards. (MWW Branch)	JAN 73	JAN 74	2B8162	0.05	0.05	-	-
	(11d) Hold a pre-application and pre-construction conference for upgrading plant to meet proposed effluent standards. (MWAD--Planning Br)	JAN 73	MAR 73	2B3149 2B8162	0.05 0.2	*(13a)		
	(11e) Apply RAPP to industry since wastes are not adequately treated. (Permits Branch)	NOV 72	MAR 73	3B2124	0.5			
	(11f) Make construction grant. (MWW Branch)	JUL 73	JUN 74	2B8162		0.3		

*Included in Basin Summary.

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

V. HENDERSON TO STATE LINE (Not including Cache La Poudre River) - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY		DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
			INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
(12) The Brush Wastewater Treatment Plant meets State removal efficiency requirements, but due to extremely high influent loading from a meat packing plant, the plant effluent is in the 140 mg/l range.	(12a)	Conduct training course for plant operators. (Manpower Development and Training)	JAN 73	JAN 74	2B7158	0.03	0.03	*(16e)	
	(12b)	Require City to have pretreatment requirement for industrial dischargers. (MWWD)	JAN 73	JAN 74	2B8162	0.05	0.05	-	-
	(12c)	Influence the State to conduct frequent O&M visits at the plant to insure that the disinfection equipment is always operating. (O&M)	JAN 73	JUN 73	2B8163	0.02	-	-	-
	(12d)	Hold pre-application and pre-construction grant conference to upgrade effluent quality of plants to meet proposed effluent and stream standards. (MWW Branch, Planning Branch)	JAN 73	MAR 73	2B3149 2B8162	0.05 0.10	*(13a)		
	(12e)	Apply RAPP to industry since wastes are not adequately treated. (Permits Branch)	NOV 72	MAR 73	3B2124	0.3			
	(12f)	Conduct O&M Survey to help insure maximum efficiency with existing facilities and evaluate industrial waste problems. (Manpower, Development and Training, Municipal Waste Water Branch)	OCT 72	DEC 72	2B7160 2B8163	.08 * .33 *			
	(12g)	Make construction grant (MWWD).	JUL 73	JUN 74	2B8162		0.3	*(13a)	

*Included in Basin Summary.

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

V. HENDERSON TO STATE LINE (Not including Cache La Poudre River) - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74-	FY 75	FY 76
(13) The Sterling Wastewater Treatment Plant does not meet State removal efficiencey requirements due to high waste loads from a meat packing company. The plant also does not provide adequate disinfection of the effluent. The present facility cannot meet proposed effluent standards.	(13a) Conduct training course for plant operators (Manpower Dev. & Training Branch)	JAN 73	JAN 74	2B7158	0.03	0.03	*(16e)	
	(13b) Require City to have pretreatment requirements for industrial discharges. (MWW Branch)	JAN 73	JAN 74	2B8162	0.05	0.05	-	-
	(13c) Influence State to hold frequent O&M visits to the plant to insure that the disinfection equipment is always operating. (O&M)	JAN 73	JUN 73	2B8163	0.02	-	-	-
	(13d) Hold pre-application and pre-construction grant conference to upgrade effluent quality of plant to meet proposed effluent and stream standards. (MWW & Planning Branches)	JAN 73	MAR 73	2B8162 2B3149	0.10 0.05	*(13a)		
	(13e) Make construction grant. (MWW Branch)	JUL 73	JUN 74	2B8162		0.3	*(13a)	
	(13f) Apply RAPP to industry since wastes are not adequately treated. (Permits Branch)	NOV 72	MAR 73	3B1124	0.2			
	(13g) Develop a 180-day notice against the Town of Sterling, Colorado. (Enforcement Branch)	OCT 72	NOV 73	3B1123	3.0	2.0		
	(13h) Conduct O&M survey to help insure maximum efficiency with existing facilities and to evaluate industrial waste problem. (MWW Branch, Manpower Development and Training Branch)	OCT 72	DEC 72	2B8163 2B7160	.33 .08	*(11a) "		
(14) Great Western Sugar Company at Ovid is grossly polluting S. Platte River during Sugar Beet Processing Season.	(14) Follow-up 180-day notice on Great Western Sugar at Ovid. (Enforcement Branch)	MAR 72	OCT 72	3B1123	0.5			

*Included in Basin Summary.

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

VI. CACHE LA POUDRE RIVER--HEADWATERS TO TED'S PLACE

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY		DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
			INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
Cache La Poudre This river is classified as a cold water fishery to Ted's Place (Greeley Water Supply Division) and then warm water fishery from Ft. Collins to Greeley and then industrial irrigated Agriculture to confluence with South Platte River. DO standard is violated at confluence with South Platte River. Review of limited data indicates possibility of reclassification of river to cold water fishery downstream at least to Greeley. Significant problems include:	(0a)	Investigate with appropriate State and Local agencies the upgrading of classification to cold water fishery from Ft.Collins to Greeley. (Planning Branch)	OCT 72	JAN 73	2B1143	0.2		-	-
(1) Collins Light and Power discharges 150° maximum.	(1)	Develop commitment letter for voluntary compliance. (Permits Branch)	JAN 73	JAN 75	3B2124	0.2	0.2		

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*Included in Basin Summary.

TABLE III - INTEGRATED BASIN TACTICAL SOLUTION AND RESOURCE REQUIREMENTS

VI. CACHE LA POUDRE RIVER - TED'S PLACE TO S. PLATTE RIVER

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
Cache La Poudre (Continued)								
(2) Regionalization study needs to be made by Planning Commission of Ft. Collins #1, #2 and Box Elder Wastewater Treatment Plant and to determine future wastewater treatment plant needs of growing Ft. Collins area. Present facilities will not meet proposed effluent standards and if not improved to do so will grossly pollute the River.	(2a) Monitor Larimer-Weld Planning Commission Basin Plan development. (Planning Branch)	JUN 72	JUL 73	2B3149	0.05	*(5a)		
	(2b) Perform O&M at Fort Collins #1 and 2 Wastewater Treatment Plant to determine capabilities of plant. (Municipal Waste-Water Branch, Manpower Training Branch)	OCT 72	DEC 72	2B8163 2B7160	.33 .08	*(11a) "		
	(2c) Hold preapplication and preconstruction meeting for upgrading designated facility as regional plant to meet proposed effluent standards. (MWW Branch, Planning Branch)	JAN 73	JUN 73	2B3149 2B8162	0.05 0.20	*(13a)		
	(2d) Make construction grant. (MWW Branch)	JAN 74	JUN 76	2B8162		0.5	0.5	0.5 *(13a)
(3) Gravel and Paving Companies indicate high suspended solids discharge which could effect establishment of cold water fishery.	(3) Investigate permit conditions and control achieved. (Permit Branch)	JAN 73	JAN 75	3B2124	0.2	0.2		
(4) The Windsor Wastewater Treatment Plant presently is meeting State water quality and effluent standards. However, with the growth in the area taking place due to the location of the new Kodak plant, the facility could become easily overloaded in the near future. The facility will not meet the proposed state effluent standards.	(4a) Hold preapplication & preconstruction grant for upgrading the facility to meet proposed State effluent standards and stream standards. (Planning Branch, MWW Branch)	SEP 73	JAN 74	2B3149 2B8162		0.05 0.50	*(13a)	
	(4b) Make a construction grant. (MWW Branch)	JUL 74	JUN 75	2B8162			0.7	*(13a)
	(4c) Perform O&M survey to insure that plant is achieving maximum efficiency from treatment facilities. (M&W Branch, Manpower Branch)	MAY 73	JUN 73	2B8163 2B7160	0.33 0.08	*(11a) "		

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*Included in Basin Summary.

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VI. CACHE LA POUDRE RIVER - TED'S PLACE TO S. PLATTE RIVER - Continued

SITUATION ANALYSIS	RECOMMENDED ACTIONS BY SUB TASK & ORGANIZATION RESPONSIBILITY	DATES		PROGRAM ELEMENT	MANPOWER REQUIRED (PROF - MAN - MOS)			
		INITIATION	COMPLETION		FY 73	FY 74	FY 75	FY 76
Cache La Poudre (Continued)								
(5) The presence of the Great Western Sugar Mill at Greeley and at Eaton along with the Greeley Wastewater Treatment Plant has resulted in severe water quality problems below Greeley. Both DO & fecal coliform standards are grossly exceeded.	(5) From regional and basin plan and plant efficiencies, determine allowable stream loading and additional plant treatment requirements if any. (Planning Branch)	JAN 73 JAN 73	OCT 73 JUL 73	2B3149 2B3143	0.05	*(5a) 1.4		
	(5a) Follow up on 180-day notice to Great Western Sugar at Greeley. (Enforcement Branch)	MAR 72	OCT 72	3B1123	0.5			
(6) The Greeley Wastewater Treatment Plant is presently overloaded primarily due to the load imposed by the Monfort Packing Company wastes. At the present time, Monfort does not pretreat its wastes. A construction grant project is now underway to enable the Greeley plant to meet State treatment requirements. The effluent waste load will probably still result in stream standards being exceeded when the Great Western Sugar Plant is in operation at Greeley. The design of the Greeley Wastewater Treatment Plant calls for an effluent of 25 mg/l ±. The plant will probably require an additional construction grant to meet the proposed standards.	(6a) Monitor progress of grant. (MWW Branch)	OCT 72	JAN 73	2B8162	0.1	*(13a)		
	(6b) Conduct O&M study of new facility and old facility to determine plant efficiency and effluent quality - (MWW Branch, Manpower Br.)	NOV 73	DEC 73	2B8163 2B7160		.33 *(11a) .08		
	(6c) Apply RAPP to industry since wastes are not adequately treated.	NOV 72	MAR 73	3B1124	0.2	0.2		
	(6d) Hold a pre-application and pre-construction grant conference so that plant will meet proposed water quality standards in S. Platte and meet proposed State effluent standards. (MWW Branch & Planning Branch)	SEP 73	MAR 74	2B8162 2B3149		0.50 0.05 *(13a)		
	(6e) Make construction grant. (MWW Branch)	JUL 74	JUN 76	2B8162			0.2	0.2 *(13a)

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*Included in Basin Summary.

SECTION G

Point Source Reductions Required

TABLE IV - WATER QUALITY IMPROVEMENT THROUGH COMPLETION OF ACTION ITEMS

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Headwaters to Bowles

Reach #1

TER QUALITY-PARAMETERS	AGGREGATED ACTION ITEMS REQUIRED FOR REDUCTION		PRESENT WASTE LOADS (24 hr - ave)	WASTE LOADS REDUCTION (SEE TABLE III)					PRESENT WATER QUALITY	ANTICIPATED WATER QU (7-day - 10 year flow) (SEE WQS & TABLE III)				
	(From TABLE III)		(See TABLE I)	FY 72	FY 73	FY 74	FY 75	FY 76	(See TABLE II)	FY 72	FY 73	FY 74	FY 75	FY 75
BOD5		1 1.2.3.4.5.6	1100 #BOD5	1100	1200	1300	1400	1500	@Waterton 8.6 mg/l D.O.			6.0	6.0	6.0
PO4-P Nutrients - NH3-N	"	"	600 + NH3-N		+ 600	+ 600	+ 600	+ 600	1.1 mg/l Total - P 0.25 mg/l Total - N			1.1 0.3	1.0 0.2	1.0 0.2
Fecal Coliform			740/100 ml.						740 100/ml.			.2M	.1M	.1M

NOTE: The numbers given for fecal coliform in the anticipated water quality for FY-73-76 are in 1000's/100 ml.

TABLE IV - WATER QUALITY IMPROVEMENT THROUGH COMPLETION OF ACTION ITEMS

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Bowles to Exposition

REACH #2

WATER QUALITY-PARAMETERS	AGGREGATED ACTION ITEMS REQUIRED FOR REDUCTION	PRESENT WASTE LOADS (24 hr - ave)	WASTE LOADS REDUCTION (SEE TABLE III)					PRESENT WATER QUALITY	ANTICIPATED WATER QU (7-day - 10 year flow) (SEE WQS & TABLE III)				
	(From TABLE III)	(See TABLE I)	FY 72	FY 73	FY 74	FY 75	FY 76	(See TABLE II) @ Alameda St.	FY 72	FY 73	FY 74	FY 75	FY 76
D.O.	II 1-6	8,000 # BOD_5	4000	5300	6350	7300	8500	2.6 mg/1 D.O.					
Fecal Coliform	"	17,000/100 ml.					16000	7,200/100 ml.		10M	5M	2M	1M

TABLE IV - WATER QUALITY IMPROVEMENT THROUGH COMPLETION OF ACTION ITEMS

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Exposition to York

Reach #3

TER QUALITY-PARAMETERS	AGGREGATED ACTION ITEMS REQUIRED FOR REDUCTION (From TABLE III)		PRESENT WASTE LOADS (24 hr - ave) (See TABLE I)	WASTE LOADS REDUCTION (SEE TABLE III) FY 72	FY 73	FY 74	FY 75	FY 76	PRESENT WATER QUALITY (See TABLE II)	ANTICIPATED [illegible] (7-day - 10 year flow) (SEE [illegible] & TABLE III) FY 72	FY 73	FY 74	FY 75	FY 76
D.O.	III 1-8	.	1000 #BOD_5	300	350	360	370	380	at Franklin Street 2.2 mg/l		3.0	3.5	4.0	5.0
Fecal Coliform	"	"	120,000/100 ml.						120,000/100 ml.		100M	10M	5M	1M

TABLE IV - WATER QUALITY IMPROVEMENT THROUGH COMPLETION OF ACTION ITEMS

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: York Street to Henderson

REACH #4

WATER QUALITY-PARAMETERS	AGGREGATED ACTION ITEMS REQUIRED FOR REDUCTION		PRESENT WASTE LOADS (24 hr - ave)	WASTE LOADS REDUCTION (SEE TABLE III)					PRESENT WATER QUALITY	ANTICIPATED WATER QU (7-day - 10 year flow) (SEE WRS & TABLE III)				
	(From TABLE III)		(See TABLE I)	FY 72	FY 73	FY 74	FY 75	FY 76	(See TABLE II)	FY 72	FY 73	FY 74	FY 75	FY 76
D.O.	IV 1-9		44,000 # BOD_5	24800	31750	34800	36850	39000	@ Henderson 2.4 mg/l D.O.		2.4	2.5	2.5	5.0
Fecal Coliform	"	"	109,000/100 ml.					$1.0[illegible]\times10^5$	109,000/100 ml.		100M	100M	100M	1M

Henderson, Colorado to State Line
Reach #5

TABLE IV - WATER QUALITY IMPROVEMENT THROUGH COMPLETION OF ACTION ITEMS

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Brighton WWTP and Great Western @ Brighton

R QUALITY-PARAMETERS	AGGREGATED ACTION ITEMS REQUIRED FOR REDUCTION		PRESENT WASTE LOADS (24 hr - ave)	WASTE LOADS REDUCTION (SEE TABLE III)					PRESENT WATER QUALITY	ANTICIPATED WATER Q (7-day - 10 year flow (SEE LRS & TABLE III)				
	(From TABLE III)		(See TABLE I)	FY 72	FY 73	FY 74	FY 75	FY 76	(See TABLE II)	FY 72	FY 73	FY 74	FY 75	FY 76
D.O.		V 1, 3a, 3b, 3c, 3d	810	350	400	450	500	550	Just downstream of G.W.Sugar 4.5 mg/1 D.O.		4.5	4.5	4.5	5.0
Fecal Coliform		"	2.7 x 10^6/100 ml.					2.96 x 10^6	140,000/100 ml.		100M	10M	5M	1N

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: USAC Dow Chemical Plant Wastewater Treatment Plant

Potential Radioactive Substances		4a, 5	Unknown	Discharge to be free of radioactive materials.										

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Broomfield and Westminster Wastewater Treatment Plant

D.O.		4a, 6a, 6b	110#BOD_5	0	0	150	200	300	No Data					
Fecal Coliform		"	5 x 10^4	4.9 x 10^4	---	---	---	---	No Data					

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Ft. Lupton Wastewater Treatment Plant

D.O.			310#BOD_5	150	150	200	200	250	No Data					
Fecal Colif.		7a, 7b	4 x 10^4						No Data		5M	5M	5M	1N

HENDERSON TO STATE LINE
REACH #5 (Page 2)

TABLE IV - WATER QUALITY IMPROVEMENT THROUGH COMPLETION OF ACTION ITEMS

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Allied Chemical Company at Mouth of St. Vrain

QUALITY-PARAMETERS	AGGREGATED ACTION ITEMS REQUIRED FOR REDUCTION	PRESENT WASTE LOADS (24 hr - ave)	WASTE LOADS REDUCTION (SEE TABLE III)					PRESENT WATER QUALITY	ANTICIPATED WATER QU (7-day - 10 year flow (SEE ERS & TABLE III)				
	(From TABLE III)	(See TABLE I)	FY 72	FY 73	FY 74	FY 75	FY 76	(See TABLE II)	FY 72	FY 73	FY 74	FY 75	FY 76
Lead & Zinc and other toxic metals.	V 8c	197# Lead & Zinc						Zn-400 ug/ml Se- 40 ug/ml			Zn > 400 mg/l		
INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Boulder WWTP's & Public Service Co. at Valmont													
D.O.	V 8a, 8b, 8d, $8d_2$	4,430	2250	2350	2500	2650	2850	At Boulder Cr., S.of S.Boulder Cr 4.7 mg/1	4.7	3.5	3.5	5.0	5.0
F.C.		1,600/100 ml.			100*/ ml	100*/ 100ml	1000/ 100 ml.	60/100 ml	1000/ 100 ml	---	---	---	---
INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Public Service Co. - St. Vrain													
D.O.	V 8d, 8d2	250# BOD_5	Plant is currently under construction.										
Radioactivity	"												
INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Longmont WWTP and Great Western Sugar @ Longmont													
D.O.	V 1, 8e1, 8e2, 8e3	4550# BOD_5	2400	2650	2800	2950	3150	Below G.W. at Longmont 0.3 mg/1		0.5	3.0	4.5	5.0
Fecal Coliform		2.2×10^5					2.19×10^5	7.4×10^6		50M	20M	5M	1M

HENDERSON, COLORADO TO STATE LINE
REACH #5 (Page 3)

TABLE IV - WATER QUALITY IMPROVEMENT THROUGH COMPLETION OF ACTION ITEMS

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Upper Thompson Sanitation Dist & Estes Park San. Dist. WWTP's

QUALITY-PARAMETERS	AGGREGATED ACTION ITEMS REQUIRED FOR REDUCTION (From TABLE III)		PRESENT WASTE LOADS (24 hr - ave) (See TABLE I)	WASTE LOADS REDUCTION (SEE TABLE III) FY 72	FY 73	FY 74	FY 75	FY 76	PRESENT WATER QUALITY (See TABLE II)	ANTICIPATED WATER QU (7-day - 10 year flow (SEE WQS & TABLE III) FY 72	FY 73	FY 74	FY 75	FY 76
D.O.		V2, 9, 9a, 9a2, 9a3	210 BOD_5	50	100	100	200	200	Not Available		6.0	---	---	---
Fecal Colif.		"	220/100 ml.		None	Req'd			Not Available		6.0	---	---	---

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Loveland WWTP and Great Western Sugar @ Loveland

D.O.		V, 2, 9b, 9b2	2,250 BOD_5	900	1100	1200	1300	1450	Below G.W. @ Loveland 4.0 mg/1 D.O.		2.5	---	---	5.0
Fecal Colif.		"	1000/100 ml.	None	required				88/100ml.	1000/	100 ml	---	---	---

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Great Western Sugar @ Johnstown

D.O.		V2	4,200 # BOD_5	3800	3900	3900	3900	3900	at Mouth of Big Thompson 2.6 mg/1 D.O.		2.5	3.5	4.0	5.0
Fecal Colif.		"	40,000/100 ml.					3.9×10^4	330,000		100M	50M	10M	1M

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Husky Oil Company and Cheyenne Wastewater Treatment Plant

D.O.		V10, 10a, 10b, 10c	9815 # BOD_5	7760	7900	8050	8100	8200	---	---	---	---	---	---
Fecal Coliform		"							---	---	---	---	---	---

REACH #5(p. 4

TABLE IV - WATER QUALITY IMPROVEMENT THROUGH COMPLETION OF ACTION ITEMS

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Ft. Morgan Wastewater Treatment Plant and Great Western Sugar @ Ft.Morgan

R QUALITY-PARAMETERS	AGGREGATED ACTION ITEMS REQUIRED FOR REDUCTION	PRESENT WASTE LOADS (24 hr - ave)	WASTE LOADS REDUCTION (SEE TABLE III)					PRESENT WATER QUALITY	ANTICIPATED [illegible] (7-day - 10 year flow) (SEE [illegible] & TABLE III)				
	(From TABLE III)	(See TABLE I)	FY 72	FY 73	FY 74	FY 75	FY 76	(See TABLE II)	FY 72	FY 73	FY 74	FY 75	FY 76
D.O.	V2, 11a - 11f	15,720 BOD$_5$	14450	15250	15350	15350	15350	Below Ft. Morgan 8.4 mg/l		2.5	3.0	3.5	5.0
Fecal Coliform	"	3.6 x 10^6/100 ml					3.59x10^6	6,900/100 ml		100M	50M	10M	1M

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Brush Wastewater Treatment Plant

D.O.	V, 12a-12g	1300 # BOD$_5$	1100	1150	1200	1200	1200	S.Platte at Balzac 4.5 mg/l D.O.		4.0	4.5	4.5	5.0
Fecal Colif.	"	7.8 x 10^6						7.9 x 10^4		7M	5M	2M	1M

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Sterling Wastewater Treatment Plant & G.W. @ Sterling

D.O.	V2, 13a-13h	10,400# BOD$_5$	8850	9000	9050	9050	9050	S.Platte below G.W. @ Sterling 9.1 mg/l BOD$_5$		5.0	---	---	5.0
Fecal Coliform	"	1.7 x 10^5		---	---	---	---	150/100 ml.		---	---	---	---

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Great Western Sugar @ Ovid

BOD$_5$	V2, 14	18,400 # BOD$_5$	17450	17550	17550	17550	17550	S.Platte at Julesberg 4.5 mg/l D.O.		3.0	4.5	5.0	5.0
Fecal Coliform	"	4.4 x 10^6/100 ml.					[illegible].39x10^5	3 x 10^6		3x10^4	3x10^3	[illegible]x10^3	1x10^3

TABLE IV - WATER QUALITY IMPROVEMENT THROUGH COMPLETION OF ACTION ITEMS

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Cache la Poudre-Headwaters to Ted's Place
REACH #6

R QUALITY-PARAMETERS	AGGREGATED ACTION ITEMS REQUIRED FOR REDUCTION		PRESENT WASTE LOADS (24 hr - ave)	WASTE LOADS REDUCTION (SEE TABLE III)					PRESENT WATER QUALITY	ANTICIPATED WATER QU (7-day - 10 year flow (SEE WQS & TABLE III)				
	(From TABLE III)		(See TABLE I)	FY 72	FY 73	FY 74	FY 75	FY 76	(See TABLE II)	FY 72	FY 73	FY 74	FY 75	FY 76
D.O.	I.11	VI.1.2.3	200#BOD$_5$	0	0	200	200	200	5.1 mg/1		5.0-	----	---	6.0
Fecal Coliform	"	"							172/100 ml.		>1000/100 ml.			---

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: ______________

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: ______________

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: ______________

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VII: Cache La Poudre--Ted's
Place to S.Platte
Reach #7

TABLE IV - WATER QUALITY IMPROVEMENT THROUGH COMPLETION OF ACTION ITEMS

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Fort Collins Wastewater Treatment Plant #1&2, Boxelder WWTP

ER QUALITY-PARAMETERS	AGGREGATED ACTION ITEMS REQUIRED FOR REDUCTION	PRESENT WASTE LOADS (24 hr - ave)	WASTE LOADS REDUCTION (SEE TABLE III)					PRESENT WATER QUALITY	ANTICIPATED WATER QU (7-day - 10 year flo (SEE EQS & TABLE III)				
	(From TABLE III)	(See TABLE I)	FY 72	FY 73	FY 74	FY 75	FY 76	(See TABLE II)	FY 72	FY 73	FY 74	FY 75	FY 76
D.O.	VII 1.2.3. V 5.	3,290 # BOD$_5$	1550	1700	1850	2100	2300	Cache La Poudre @ Prospect St. in Ft.Collins 5.4 mg/l		4.0	4.5	4.5	5.0
Fecal Coliform	"	----------						290/100 ml.		1M	1M	1M	1M

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Windsor Wastewater Treatment Plant

D.O.	VII 5.6 V 5.	300# BOD$_5$	0	300	600	900	1200	None Available		5.0	5.0	5.0	5.0
Fecal Colif.	"	No Data						" "		---	---	---	---

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES: Greeley WWTP, G.W. Sugar @ Greeley & G.W. Suagar @ Eaton

D.O.	V 3.5 VII 7.8.9.10.11	37,300 #BOD$_5$	34350	37550	37880	38180	38500	Cache La Poudre at Mouth 2.8 mg/l D.O.		2.8	3.0	3.5	3.5
Fecal Coliform	"	2.7 x 10^4					2.69 x 10^4	4.9 x 10^6		5x10$^{[illegible]}$	5x10^4	5x10^3	1x10^3

INDIVIDUAL SOURCE OR CLUSTER OF SOURCES:

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